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THE ULTIMATE STANDARD OF VALUE.

There are certain unsettled questions in economic theory that have been handed down as a sort of legacy from one generation to another. The discussion of these questions is revived twenty or it may be a hundred times in the course of a decade, and each time the disputants exhaust their intellectual resources in the endeavor to impress their views upon their contemporaries. Not unfrequently the discussion is carried far beyond the limits of weariness and satiety, so that it may well be regarded as an offence against good taste to again recur to so well-worn a theme. And yet these questions return again and again, like troubled spirits doomed restlessly to wander until the hour of their deliverance shall appear. It may be that since the last discussion of the question we have made some real or fancied discoveries in the science, and some may think that these throw new light upon the old question. Instantly the old strife breaks forth

anew, with the same liveliness as if it possessed the charm of entire novelty, and so it continues year after year, and will continue, until the troubled spirit is at last set free. In this class we find the question—What is the “ultimate standard of value,” (*dem letzten Bestimmgrunde des Wertes der Güter*)? The contest over this question began as early as the days of Say and Ricardo. More recently the German, Austrian, Danish and American, English and Italian Economists have taken it up, so that the contest has assumed an international character.

The present generation has indeed some justification for again renewing the discussion. It cannot be denied that of late we have made some important additions to the sum of our knowledge in regard to the theory of value. This at first resulted in an increase in the number of conflicting opinions, but if we are not greatly mistaken, the present phase of this difference in opinion is due to a positive misunderstanding, which stands as a rock of offence in the path of explanation.

I believe that this fatal misunderstanding may now be definitely and finally removed, by an investigation which need possess no other merits than those of care and exactness, and that this will result in permanently advancing the controversy by several paces. In this belief I venture upon a step which otherwise it would be difficult to justify, and propose to add yet another victim to the hecatombs already offered upon the altar of economic theory, though, owing to the necessity of pedantic thoroughness in such an investigation, it is a sacrifice which may not commend itself to some of our readers.

I.

THE PROGRESS AND PRESENT POSITION OF OPINION.

Since the time when Economics first became a science, there have been two rivals for the honor of being considered the “ultimate standard of value,” the utility that the goods

afford, and the cost of their attainment. Any tyro who takes up this question of the "value of goods" will invariably start out with the idea that we value goods because, and in the measure that, they are useful to us. He will, therefore, incline to the opinion that the ultimate cause of the value of goods is to be found in their utility. But this naïve opinion is soon disturbed by a thousand practical experiences. It is not the most useful things, as air and water, but the most costly things that show the highest value. Again, in innumerable instances, it is undoubtedly true that value and price do accommodate themselves to cost of attainment, and so at the very outset the spirit of dissent was introduced into the theory of value, and has remained there until the present day. There was either this divergence of opinion, or a division of the field of value phenomena into two sections, that of utility and that of cost; or, finally, both domain and opinions were divided.

The classical theory of value, as is well known, divided the domain of the phenomena of value. A distinction was drawn between "value in use" and "value in exchange." The "value in use" of goods was thought to rest entirely upon utility, but beyond this passing reference to the domain of utility the classical theory did not trouble itself about value in use. In "value in exchange," a distinction was made between monopoly or scarcity goods on the one hand, and freely reproducible goods on the other. The value of goods of the first class, *e. g.*, wines of rare vintage, statues or pictures by leading artists, rare old coins, patented inventions, was thought to depend upon the demand for them, and this in turn depended upon their utility. The value of goods of the second class was thought to depend upon their cost of production, or, as it has been more accurately stated, since the time of Carey, upon their cost of reproduction. To this, as we know from experience, the value and price of all freely reproducible goods tends, in the long run, to conform.

As we have said, the classical theory does not enter into any discussion of "value in use." It also practically ignores the value of scarcity goods, holding, that instances of such value are few in number and of little importance. The stress was thus thrown upon the value of freely reproducible goods. In this way it came about that "cost" was held to be the "ultimate standard of value." This view did not escape frequent and serious, though for the most part, unsuccessful attacks. Say, MacLeod and many other celebrated or little known writers have, at one time or another, attacked this cost theory of value.

It was urged that things that are not useful do not have value, no matter how high their cost of production or of reproduction may be, and therefore that high cost can only result in high value, when associated with a correspondingly high utility. From this the further conclusion was eagerly drawn, that the correspondence between value and cost, which is not to be denied, does not result from value regulating itself according to cost, but rather from cost regulating itself according to value, since higher costs are only undergone when, from the outset, correspondingly higher values are anticipated.

This line of argument, however, is itself open to serious and very manifest objections. It might be urged that just as there can be no value without utility, no matter how great the cost may be, so there can be no value without cost, no matter how great the utility may be. This is manifest in the familiar instances of air and water. The adherents of the cost theory had so much of direct experience in their favor, confirmed as this was by the undeniable interdependence of cost and value, that they for a long time had the advantage in this constantly recurring strife.

A remarkable shifting of the scene was brought about by the appearance of the theory of marginal utility. The main points in this theory I may safely assume to be well known. Its corner-stone is the distinction between usefulness

in general, and that very definite and concrete utility, which, under given economic conditions, is dependent upon the control over the particular good whose value is to be determined. According to this theory, value arises as a rule—that there are exceptions is expressly emphasized—from the utility of goods, not however from some abstract and ever-varying usefulness which cannot be definitely measured, but from that use or useful employment (*Nutz Verwendung*), which in a definite concrete case is dependent upon the control over the particular good.

Since of all the possible useful employments to which the good may be put, it is not the most important, but the least important, that a rational being would dispense with first, the determining utility is the smallest or least important utility among all the useful employments to which a good may be put. This determines its value and is called the marginal utility.

This more exact form of the use theory of value meets in a clear and definite way the objection urged against the older "use" theory of value; namely, that free goods, no matter how useful they may be, have no value. The answer is, that since these free goods exist in superabundant quantities, there is for us no utility dependent upon a concrete quantity of the same, as a single glass of water or a single cubic metre of air. Their marginal utility therefore is zero. Again, this theory of marginal utility gives us the basis for a new and vigorous attack upon the cost theory of value. Considered from one point of view, the cost that determines the value of any product represents nothing else than the value of the producers' goods. If now, as we are compelled to do in a scientific investigation, we inquire how we are to determine the value of these producers' goods, we find that this, too, in the last resort is determined by marginal utility. The cost therefore exercises, as it were, only a vice-regency. It cannot be denied that under certain circumstances it governs the value of certain products, but it is itself, at least in

most cases, governed by a still higher ruler, namely, "marginal utility." Cost, therefore, is for the most part merely a province in the general kingdom of utility, and it is to this last that we must concede the position of the universal "ultimate standard of value." This proposition was first placed in opposition to the prevailing classical theory, in a bold and uncompromising way, by Jevons. "Value depends entirely upon utility," this writer emphatically declares in the very beginning of his great work on "The Theory of Political Economy." This proposition has since found even clearer and more exact statement at the hands of the Austrian Economists, nor have we even yet entirely escaped from this newest phase of the old struggle between cost and utility as the ultimate determinants of value. The present contest is notable, not merely for the number and scientific rank of those who are parties to it, among whom may be found many of the ablest economists of all countries, but also because of the extraordinary variety of opinions advanced. Instead of two opposing conceptions, we find a whole series of separate and seemingly unrelated opinions, each of which is held with the greatest persistence.

The most extreme opinion at one end of the series is that which finds statement in Jevons' proposition, that "value depends entirely upon utility." It must, however, be added that while Jevons occasionally gives statement to this proposition in the above sweeping and uncompromising terms, yet the doctrine as expounded by him contains elements which necessarily lead to a limitation of this proposition. The addition of these necessary, though not highly important limitations, gives us the doctrine as taught by the Austrian economists.* They, therefore, stand next to

*This name, given us by our opponents, includes a certain group of theoretic economists. Not all of those included are Austrians, nor does the group include all the Austrian economists. I would also take occasion to remark that when in the following I speak in the name of the Austrian economists, I do not wish that anyone else shall be held responsible for what I may say or for the manner of saying it. Conversely I do not wish to place myself in the position of being responsible for the statements of every member of that group. Again, while I

Jevons in the series of opinions. Their position is that cost does not officiate as the original and ultimate determinant of value, except in a comparatively limited number of unimportant cases.* The great majority of value phenomena are subject to the dominion of utility. This dominion is exercised in some cases directly, but in a still greater number of cases indirectly. When exercised indirectly the value is, of course, first determined by certain costs, but closer analysis shows that these costs are themselves determined by utility.

At the other extreme end of the series, we find the eminent Danish economist, Scharling, who would establish cost (under the title of "difficulties of attainment") as the sole ruler over the entire domain of value; over value in use, as well as over value in exchange; over the value of freely reproducible goods, as well as over the value of scarcity goods.†

Quite close to Scharling, who is a very pronounced opponent of the theory of marginal utility, we find the acute American thinker, J. B. Clark, who is a no less decided adherent of that theory. This illustrates how strangely confused the controversy has become. Clark also makes cost the general and ultimate "standard of value," though in a different sense from Scharling. According to Clark, the final and determining condition is the amount of personal fatigue, pain or disutility which is imposed upon the laborer by the last and most fatiguing increment of his day's work.‡

have given statement to certain general doctrines of the Austrian economists, yet I would expressly state that the kernel of the doctrine does not belong to me, but is, to a large degree, the outcome of the investigations of my able colleagues, especially Menger and Wieser.

* Wieser's "*Ursprung und Hauptgesetze des Wirtschaftlichen Wertes*," Wien, 1884, p. 104. Then my "*Grundzüge der Theorie des Wirthschaftlichen Güterwertes*," in Conrad's *Jahrbücher für Nat-Oek.* N. F. B. XIII, 1886, p. 42. Then my article, "*Wert*," in Conrad-Lexischen *Handwörterbuch der Staatswissenschaften*.

† Essay on the "*Werttheorien und Wertgesetze*," in Conrad's *Jahrbücher*, N. F. B. XVI.

‡ "Ultimate Standard of Value," *Yale Review*, November, 1892.

Somewhat nearer the middle of our series, though still not far from the cost end, we find those writers who, with certain modifications, uphold the old classical theory. It is here that we find the learned and contentious Dietzel,* of Bonn, who so divides the field of value that the value of scarcity goods is determined by utility, while the value of freely reproducible goods is determined by the cost. His position differs from the classical theory, in that he divides the domain of value in use between utility and cost, in the same way that he divides the domain of value in exchange. The classical theory, on the other hand, puts the use value entirely under the dominion of utility. Quite close to Dietzel, we find the Italian economist, Achille Loria, and the able American defender of the classical school, Professor Macvane. The latter has recently attacked the position of the Austrian economists, in two polemical papers of great acuteness. His interpretation of the Austrian theory, however, is not always accurate, nor always free from polemic exaggeration. His chief objection is that their conception of cost as "a sum of producer's goods possessing value" is obsolete and untenable. He holds that the only genuine economic cost of production is labor and abstinence (more correctly, waiting), which, in the case of freely reproducible goods, are the final and entirely independent regulators of value.†

Where opinions vary so widely from one another, some one is usually found who will take a middle course, hoping to find a solution for the problem in the golden mean. This mission of conciliation has been undertaken in this case by no less eminent economists than Professor Marshall, of

* *Die Classische Werththeorie und die Theorie vom Grenznutzen*, Conrad's *Jahrbücher*. "Zur classischen Wert und Preistheorie," N. F., Vol. 20, in the same *Jahrbücher*, third edition, Bd. 1.

† "Böhm-Bawerk on Value and Wages," in the *Quarterly Journal of Economics*, October, 1890; also "Marginal Utility and Value," in the same journal, April, 1893. Near the completion of the present paper, a third paper by Professor Macvane came to hand, "The Austrian Theory of Value," *ANNALS OF THE AMERICAN ACADEMY*, November, 1893.

Cambridge,* and Professor Edgeworth, of Oxford.† Both of these writers incline toward the theory of marginal utility, but have perched themselves very nicely upon the middle round of the ladder, from which vantage-ground they send forth gentle blame and conciliating applause to both parties in the discussion. Jevons and the Austrian economists are censured for exaggerating the importance of marginal utility, while the adherents of the classical theory are taken to task for underrating its importance; the truth, they say, lies in the middle. Scarcity goods, without doubt, have their value determined entirely by utility. In the case of freely reproducible goods the demand is governed by utility, and the supply by cost; since the price is determined by the interaction of these two factors, one cannot say either that utility alone or that cost alone determines value; but rather that utility and cost co-operate with each other in the determination of price, like, to use Professor Marshall's figure, the two blades of a pair of shears.‡

Criminal lawyers of long experience are wont to apply to obscure and complicated cases the motto: *Cherchez la femme!*

For my own part, when, in our science, I find many clear and able thinkers at odds about a given point, I usually ask myself, where is the ambiguous or elusive concept with which

* "Principles of Economics," London, 1890 (second edition, 1891), and "Elements of Economics of Industry," London, 1892, *passim*.

† A very able criticism of my "Positive Theory of Capital," in the *Economic Journal*, June, 1892, page 328. Also in the same number a criticism of Smart's "Introduction to the Theory of Value," by the same writer.

‡ Among other noteworthy contributions to the discussion of this theme I would mention Patten's "Theory of Dynamic Economics," 1892; also a paper by the same writer in a recent number of the *ANNALS OF THE AMERICAN ACADEMY* on "Cost and Expense." Patten takes a position which in the main is not far from that of the Austrian economists. His point of view is, however, peculiar, in that he throws special emphasis upon the influence of consumption upon the value of goods. This is a special theme which lies outside of the province of this paper. It still remains to notice the work of Irving Fisher ("Mathematical Investigations in the Theory of Value and Prices"), Connecticut Academy, 1892; also a very able work of Benini ("Il valore e la sua attribuzione ai beni strumentali"), Bari, 1893. The views of the Austrian economists have found very able and, because of many original features, very interesting statement, at the hands of W. Smart ("Introduction to the Theory of Value," London, 1891).

they are playing. In this case we need not search far afield; it is the concept of "cost."

II.

THE VARIOUS MEANINGS OF THE WORD "COST."

The term "cost," like many of the other terms employed in political economy, is used, both in scientific discussions and in practical life, in several different senses. Even when in a general way we agree in saying that the "cost of production of a good is the sum of the sacrifices involved in the creation of the good, this, by no means, guarantees that we all have the same thing in mind. In the estimation of these sacrifices, we may employ several different methods of measurement. These give us results which, under certain circumstances, will differ not merely with reference to the terms employed, but also with reference to the phenomena indicated by these terms.

First of all, we may distinguish between what might be called the "synchronous" and the "historical" methods of estimating sacrifices. According to the former, we take a unit of the total sacrifices as the basis for our reckoning, a unit which contains an increment of all the forms of sacrifices, which, at any instant, must enter into the production of the commodity. In the production of cloth, for instance, we consume at the same time, yarn, looms (wear and tear), the labor of weavers, coal, etc., besides a great many subordinate aids to production. By this method we usually arrive at a very extensive list of production sacrifices. In order to obtain a single expression for this aggregate, or for the height of the cost, we must bring these various elements in production under a common denominator. This may be done by estimating them all according to their value or price. Hence, by this synchronous method of reckoning, the cost equals the aggregate of the means of production, that have been sacrificed in the creation of the commodities, estimated according to their value.

This is undoubtedly the sense in which the term cost is understood in practical business life. It is in this way, that the manufacturer, the farmer and the merchant reckon their cost. This, too, is the sense in which Professor Marshall employs the term when he speaks of the "money cost of production,"* and in my own writings about value and capital, I usually employ the term cost in the same way. Usually but not always, because for certain purposes another mode of estimating sacrifices, becomes important and may not be neglected. This is the historical method. It is quite manifest that many of the concrete forms of goods, which we to-day are compelled to sacrifice to purposes of production, are themselves the product of past and more original sacrifices. For example, the wood and coal that we consume to-day in the production of cloth, and likewise the machine which we wear out, are themselves the product of previous sacrifices of labor. If we go behind these material commodities to the sacrifices which the human race has suffered in successive periods of time, in bringing them into existence, or if you like the sacrifices necessary to reproduce them, the list of the historical production sacrifices would be greatly simplified. It would include two, or at most three, elements. First of all comes *labor*, which without doubt is the most important of these elements. Then comes a second to which many economists have given the name, *abstinence*. Perhaps a third might be added, namely, *valuable original natural power*; though many might decline to regard this last as a sacrifice.

For our present purpose, the extension of the discussion to the last two elements, about which there may be some question, is not at all necessary. We may indeed leave them entirely out of the discussion, and take the most important of the above elements—labor—as the representative of the elementary production sacrifices. Of course we do not mean

* "Elements" vol. i, p. 214. Compare especially the enumeration of the elements of cost on p. 217.

that we would either deny or overlook the co-operation of the other elements; but, in the question which here interests us, these elements play a part in no way different from that played by labor, so that the result obtained for the latter may in a general way be regarded as true of the other elementary production sacrifices. It is therefore hardly necessary to repeat the same argument for the other elements.

As I have already remarked, the historical mode of viewing cost is regarded by Professor Macvane as the only correct method;* whether or not he is right we have yet to inquire. It is employed by Professor Marshall in the statement of his conception, of "the real cost of production."† In numerous instances I also have had occasion to make use of it, as when I endeavor to show that capital does not possess original productive power. Again, when in explaining the operation of the law of cost,‡ say in the iron industry, I declare in a brief way, that the necessary means of production are mines, direct, and indirect labor.§

According to this historical method of reckoning cost, labor may be regarded as the chief representative of all production costs. But the sacrifice arising from the expenditure of labor may itself be measured by different standards or scales. We can measure it either according to the amount of the labor (*i. e.*, the duration of the labor), according to the value of the labor, or, finally according to the amount of the pain or disutility, which is associated with the labor.

* In his paper, "Böhm-Bawerk on Value and Wages," pages 27 and 28, and more recently in his paper on "The Austrian Theory of Value," page 14. In order to avoid any possible misunderstanding that might result from a difference in the use of the term "historical cost" by Professor Macvane ("Marginal Utility," page 262), I would expressly state, that I apply the term "historical" as antithetical to "synchronous." I therefore include under this term not only that cost of production, which has actually been expended in the past, but also the cost of reproduction, in so far as this "historical" may be resolved into the single state of primary productive power, which must in successive periods of time be applied or expended.

† "Elements," page 214. "The exertions of all the different kinds of labor that are directly or indirectly involved in making it, together with the abstinences or rather the waitings required for saving the capital used in making it: all these efforts and sacrifices together will be called its real cost of production."

‡ "Positive Theory of Capital," page 95 of English edition.

§ *Ibid.* page 229 of English edition.

Obviously, through the use of these different standards of measurements, one will arrive at very different formulas for expressing the amount of the costs. If, for instance, one were asked: What is the cost of production of a certain piece of cloth? he would answer according to the first scale or standard, twenty days' labor; according to the second (if a day's labor cost say eighty cents), labor to the value of sixteen dollars, and according to the third, a certain sum of pain or disutility, which the laborer must endure.

But it is important that we should here see clearly, that this involves more than a mere difference in the terms employed. For according as we employ one or the other of these scales or standards, our estimates of the actual amount of the cost of any commodity will vary. They will not only be different, but may even positively contradict each other. Suppose, for instance, that a certain commodity A requires for its production twenty days' labor, which is paid for at the rate of eighty cents per day; again let us assume that a certain other commodity, B, requires thirty days' labor, which is paid for at the rate of forty cents per day. Now if we employed the first scale or standard, we would reach the conclusion that the cost of A was less than the cost of B, (twenty against thirty days' labor). By the application of the second, we reach the directly opposite conclusion, that the cost of A is greater than the cost of B (labor to the value of sixteen dollars against labor to the value of twelve dollars). It is also clear that even though we assume that the labor in these cases is equal, either in amount or in value, this does not necessitate the conclusion that the amounts of pain or disutility are equal. The labor of a great artist, which perhaps is paid the highest of any form of labor, may not only not cause him any pain, but may even yield him, quite independent of all economical considerations, a large measure of pleasure. It might therefore very readily happen that by the application of the third standard, the cost of a commodity would seem very small, while its cost, according

to the other two standards, would seem very large, and conversely.

This short resumé of the uses that have been made of the term "cost of production" makes it clear, that if we would avoid idle disputation, all further discussion of this subject must be preceded by the consideration of a preliminary question. A question which, for the most part, has been neglected by those who have taken part in the general discussion. The whole controversy, in its final issue, turns upon the famous "law of cost," which holds that the value of the majority of goods, namely, those which may be regarded as freely reproducible, adjusts itself in the long run according to the cost of production. As to the actual manifestation of such a law, there can be no question. Its existence is empirically proven, and so far as the actual fact is concerned is unanimously acknowledged by all parties to the discussion. The real question is as to the deeper meaning, the final theoretical conclusions, which may be deduced from this empirically established law of cost. But before we can enter upon any inquiry in regard to this deeper meaning, we must first know in what sense the term "cost" is to be employed.

That it cannot at one and the same time, have all of the above enumerated meanings, the preceding examples make very manifest. If the cost of a commodity A, taken in one sense is higher, and taken in another sense is lower, than the cost of a commodity B, it is manifest that the price cannot, at one and the same time, be adjusted in both senses according to the cost. In that event the price of the commodity A would at one and the same time be higher and lower than the price of the commodity B. Our most pressing problem, therefore, is to find a solution for that preliminary question, to which we have referred, a question which finds statement in the title of the following chapter.

III.

FOR WHICH OF THE DIFFERENT MEANINGS OF THE WORD
"COST" IS IT REALLY TRUE THAT, ACCORDING TO
THE EXPERIENCE OF INDUSTRIAL LIFE, PRICES
ADJUST THEMSELVES ACCORDING TO COST.

It is undoubtedly true for the value sum of the synchronously reckoned cost; or for what Professor Marshall calls the "money cost of production." This is the cost from which, in practical life, the "law of cost" receives its most direct and effective confirmation. The action of the merchant is determined by the amount which he must expend for all the necessities of production. If the price of the ware is not sufficient to cover this outlay, he ceases to bring the ware to market; conversely, if the price yields a fair surplus over and above this outlay, the producers increase the supply until the price, in the above sense, is adjusted according to the cost. It is therefore, from the standpoint of the practical man's estimate of the money cost of production, that the "law of cost" is always demonstrated. Even such writers as Professor Marshall have recourse in the first instance, to this method of proof.*

We do not mean to say that this "law of cost" is only true for the synchronous method of reckoning money cost. On the contrary, it is in a certain sense applicable also to the historically reckoned cost; and it is this extension of it which, since the time of Adam Smith, has excited the greatest interest among writers on the theory of value. The only question is, to which of the different conceptions that are included under the historical method of reckoning cost may this be applied.

There is no doubt that it is true—in that approximate way in which any "law of cost" can be true—of the primary elements of cost, labor and abstinence, measured according

* For instance, "Elements," page 222, "the normal level about which the market price fluctuates will be this definite and fixed (money) cost of production." Compare also the explanation of "equilibrium," on page 219.

to their value. We might put this in a more concrete form as follows:

In those goods that generally obey the "law of cost," the price of the finished product tends to an approximate equality with the total sum, that must be expended in wages and interest during the whole course of its production.

This proposition, I believe, is common to all theories of value including the classical (see A. Smith and J. S. Mill), and really follows as a logical consequence from the older theories. We have said that the price, say of cloth, tends to adjust itself to the money cost of producing cloth. This consists in part of the wages and interest, which are paid directly in this industry (the wages of weavers); also, in part, of the money expended for the consumption and durable goods sacrificed in its production, for instance, the yarn consumed. But here again, the money price of yarn, according to our proposition, would tend to adjust itself to the spinner's money cost. This again consists, in part, of interest and wages of spinners, and in part, of the money expended upon consumption and durable goods, say the wool consumed.

It is manifest that the analysis may be continued in this way until finally the money cost of every single stage of production is resolved into interest and wages. In so far as the prices of the finished product or of the intermediate products (cloth, yarn, wool, etc.), actually conform to their money cost of production, they cannot fail, in the end, to coincide with the total sum of the interest and wages expended in their production. Or what is the same thing, they will agree with the total outlay of the original elements of production—labor and abstinence—rated according to their value or price.

The primary outlay in production, especially the labor, to whose consideration we will, for the sake of brevity, confine ourselves, can, as we know, be measured by other scales or standards.

If we attempt to verify the law of cost, with reference to these other methods of measuring costs, we soon come to grief.

It is very clear, for example, that the "law of cost," in the sense that the price tends to conform to the quantity or duration of the labor expended, will not hold good. To prove this, we need only advert to the simple fact that the product of a day's labor of a machinist or cabinetmaker is much higher in value than the product of a day's labor of an ordinary ditch-digger. This holds good, not only for the difference between skilled and unskilled labor, but also for the less pronounced differences that exist between the various groups or grades of common labor. The well-known doctrine of the socialists, which bases all value upon the quantity of labor expended, must either do violence to the facts or be untrue to itself; and this entirely independent of the fact that it ignores the cost element—abstinence. When, for example, Marx concedes that skilled labor must be translated into terms of common average labor, and so, for the purposes of estimating cost, must be regarded as some multiple of this common average labor, he is only verbally faithful to the proposition that the duration of labor is the true measure of cost. As a matter of fact, he makes, the *value* of the labor expended the measure of the cost.

Our investigation becomes far more difficult when we come to consider the fourth of the above enumerated meanings of the word cost; this meaning understands by the word cost, the sum of the pains or disutilities which the laborer must endure in production. This brings us to the cardinal point of the whole question, a point, however, which requires the most careful investigation.

It is quite conceivable that the correspondence which we have already noted between the value of freely reproducible goods and their synchronously reckoned cost, and again between that value and the value of the labor expended, may extend to a third member. In this case the law of cost

would be true in a threefold sense. To establish this it would be only necessary to show, that the value of the labor corresponds with reasonable accuracy to the amount of pain that the laborer endures.

Such a correspondence actually occurs under a certain definite assumption. This assumption depends upon the facts, first, that the pain of labor increases with its duration, and second, that the labor is continued until the pain of the last increment of labor (*Arbeitsteilchen*), say the last quarter of an hour, is in exact equilibrium with the marginal utility of the product of that final increment of labor. In this event we have here a common rendezvous for our several items—the utility of the product, the pain endured by the laborer, the value of the labor, and finally the value of the product.

Let us illustrate this by an example. We will take a man engaged in one of the ordinary trades, say a cabinetmaker or a locksmith. A certain amount of money, say five cents, which he obtains for a quarter of an hour's labor, has for him a definite value. This is determined by its marginal utility, or by the importance of the last need which he is in a position to satisfy through the outlay of five cents. Now, according to well-known principles, about which my English and American colleagues and myself are in entire agreement,* this marginal utility will be smaller, as the daily pay of the laborer increases. It will, for instance, be smaller when the laborer receives two dollars and forty cents for twelve hours of work, than when he receives one dollar and

*The very nature of my problem specially compels me to seek some settlement or agreement with the representatives of English and American science. Partly because their rival opinions touch most nearly the salient points of the controversy; partly because they already, in consequence of the great weight of scientific authority which they have upon their side, and of the exceptionally able representatives which they have found, are in advance of all others. Besides, I have elsewhere taken occasion to refer to some of the others whose opinions bear upon this point. I referred to Scharling's theory in my "Theory of Capital," p. 160, English edition; to Dietzel in two papers, "*Zwischenwort zur Werththeorie*," and "*Wert, Kosten und Grenznutzen*," in Conrad's *Jahrbücher*, N.F., vol. *xxi*, and third edition, vol. *iii*.

sixty cents for eight hours of work. Again, according to equally well-known principles, about which there is a no less complete agreement among all parties to the controversy, the fatigue and strain of the laborer grows with the increase in the duration of labor. Other things being equal, the tenth hour of labor is unquestionably more fatiguing than the third or sixth, and a fourteenth or an eighteenth would certainly be still more fatiguing. Now, since the marginal utility of every five cents added to the pay of the laborer is less than the utility of the last preceding five cents, and since with each additional quarter of an hour of labor the pain increases, there must come a point where the two will meet or be in equilibrium with each other. It is also undoubtedly true that when the laborer is entirely free to determine the length of his labor day, he will continue his labor until this point of equilibrium is reached. He will work nine and one-half hours when and because to his mind five cents is just sufficient indemnification for the disutility of the thirty-eighth quarter-hour of labor, but not sufficient for the somewhat greater disutility of the thirty-ninth quarter hour.

This point of equilibrium will, of course, vary for different laborers. A laborer, for instance, who must provide for a large family, and to whom the addition of five cents means the satisfaction of a quite important want, will be inclined to work longer, as will also a strong, vigorous laborer, who feels less fatigue from this labor. On the other hand, the sickly or lazy laborer, or the one who has fewer, or less pressing wants, will stop at an earlier point. He will prefer a longer period of leisure to the increased amount of wages, which he would have obtained had he continued to work.

It is just as manifest that, other things being equal, the point of equilibrium will vary for one and the same laborer, according to the amount of the wage which he will receive for the additional quarter hour. A laborer who would work thirty-eight quarter hours, for five cents per quarter hour, would perhaps work forty-two quarter hours, if he could

obtain seven and a half cents per quarter hour, while if he received only two and a half cents, he might only work thirty quarter hours.* Or the number of hours of labor and the degree of fatigue, which the laborer will endure, will vary with the rate of wages.

Upon what then, under the above assumption, will the rate of wages (in other words the value of the labor) and the value of the created products depend? For the simple conditions of a Robinson Crusoe this question is already answered. The value of the goods produced, which for a Crusoe have no price, but merely a subjective value, will equal their marginal utilities to him. Since the product constitutes his wages or the recompense for his labor, the rate of wages or the value of his labor is identical with the value of the product.

Finally, Crusoe, as a reasonable being, will continue his labor to that quarter of an hour, the disutility of which will be exactly counterbalanced by the utility of the goods produced in this quarter of an hour. All four of the items which we have been considering would then be equal. Value of product—value of labor—marginal utility—pain of labor. If it is asked: What, in this case, are the factors that determine the value of the product? We must reply that "utility" and "disutility" are here of equal importance. The utility of the goods produced and the pain of the labor undergone. This point of equilibrium by which the marginal utility, and therefore the value, is determined, is in reality the marginal point for both utility and disutility. We might therefore, in this case, say with Professor Marshall,

* I would not maintain that low wages must always result in a sinking of the point of equilibrium. It may very readily happen, that with very low wages the necessities of the laborer and so the marginal utility of the unit of money, which he receives, is so great that he is compelled, even to satisfy the most pressing wants, to endure long hours of labor. This occurs with us in the case of the miserably paid sewing women, who not unfrequently work from fourteen to fifteen hours a day. But, as a rule, and especially where the payment of wages is so arranged that the overtime is paid for as a separate item from the regular time, the advance in wages will result in an increase in the supply of labor. This is always under the assumption that the laborer is free to determine how long he will work.

that, in the determination of value, utility and disutility, or pleasure and pain, work together like the two blades of a pair of shears.

Though essentially the same thing, the matter takes a somewhat more complicated form, when we turn to the consideration of a laborer in our actual economic world; still assuming of course that the laborer is free to continue, or to terminate his labor when he pleases. Here also, the value of the product will equal the value or wages of labor. This will be true, even though the laborer does not receive his reward directly in the form of the created product, but receives a certain money consideration, in lieu of his share of the product. When competition has done its work, and forced the value of the product down, until it equals its cost, then the wages which the entrepreneur has paid out either directly or indirectly, must equal the value of the product, (we here ignore all payments for abstinence). How high will the value of both product and labor go? We would again answer, to the point at which marginal utility and marginal disutility coincide. Here, however, a new element enters into the problem. We have to consider, not only the marginal utility which the wages have for the laborer, but also the marginal utility which the product of labor has for the general public or for the consumer.

Every consumer continues to buy so long as the marginal utility of the ware exceeds the price sacrifice. Since the marginal utility decreases as the supply increases, an increase in the amount produced cannot find a market except at a lower price. When, for instance, thirty million pieces of a product, each of which cost one-quarter hour's labor, will find purchasers at a price of seven and one-half cents; thirty-five million pieces will perhaps bring only six cents each; thirty-eight million only five cents; forty-two million only four cents, while fifty million might only find buyers at two or at one and one-half cents. On the other hand, the amount that will be produced will depend, *ceteris paribus*, upon

the length of the working day. But this again, as we have seen, depends in part upon the rate of wages, or upon the amount which the laborer will receive for an additional quarter hour of work. With a wage of two and one-half cents per quarter hour, every worker, according to the figures of a previous example, would be willing to work thirty quarter hours per day: with a wage of five cents per quarter hour, they would work thirty-eight quarter hours; with a wage of seven and one-half cents per quarter hour, they would work forty-two quarter hours. If the number of workers be taken as a million, then with a wage of two and one-half cents per quarter hour, they will produce thirty million pieces; with a wage of five cents, thirty-eight million, and with a wage of seven and one-half cents, they will produce forty-two million pieces of a product of which each piece costs one-quarter hour of labor. It is manifest that under these conditions supply and demand will be in equilibrium when we have a product of thirty-eight million pieces with a value of product, and a wage of labor equal to five cents. This would be the price of the commodity and the level of wages at which demand and supply would come into equilibrium. All those who desire to purchase at that price would be satisfied, and, at the same time, the price would afford sufficient indemnification for the pain endured by just the right number of workmen. It must not, however, be forgotten that in the fixing of this level the utility of the ware is just as important a factor as the disutility of the labor, or that in the determination of this level they work together like the two blades of a pair of shears.

Here, however, my English and American colleagues and myself must part company. They seem to regard this rule as capable of quite general application.* They even seem

* Professor J. B. Clark, in his paper on the "Ultimate Standard of Value," has set forth with great clearness and elegance, nearly the same thought which I have employed in the text. He certainly draws from it a conclusion which I am no more prepared to accept than his brilliant statement of a part of their premises.

disposed to hold that it is the great law itself. I hold, on the other hand, that this rule has no wider application than is justified by the assumption upon which it is based; namely, that the laborer is entirely free to determine how long he will continue his daily labor. When, however, we turn to the actual facts of our present industrial life, we find first that this assumption does not obtain, save as an exception, and that it does not correspond at all with the other assumptions upon which our empirical law of cost is based.

IV.

THE RELATION OF THE "LAW OF COST" TO DISUTILITY
CONTINUED.

To demonstrate the first of the two propositions with which I closed the preceding chapter, I need only advert to well-known facts. It is, for instance, a fact of common experience, that in most branches of production the laborer is not free to determine the length of his working day. The hours of labor are fixed more or less by custom or law. This is true in factory and workshop, as well as in agriculture. In some countries it is the eleven-hour day, in others the ten-hour day, that prevails. If the present labor agitation should be at all successful, we may see the eight-hour day quite generally adopted. In any event, the amount of the pain of labor is more or less fixed. When changes occur in the rate of wages or in the value of the product, the laborer is not free to make a corresponding change in the length of his working day, and thus restore the equilibrium between utility and disutility. If the ten-hour day prevails, we cannot say that with a wage of seven and one-half cents per quarter hour, a million laborers will work forty-two million quarter hours, and hence that forty-two million pieces of commodity will be produced, while with a wage of five cents, they will labor thirty-eight million quarter hours, and produce thirty-eight million pieces of commodity. But whether

the wage was five or seven and one-half cents, they would, in all probability, work forty million quarter hours and produce forty million pieces of commodity. In this way the equilibrium, in the case of the individual laborer, between the wages and the disutility of labor is disturbed. With many the disutility of the last quarter hour of labor will be less than the utility of the wage received, while for others it will be in excess of the same, *i. e.*, the laborer in this last instance, will find that the disutility of the last quarter hour of labor (or it may well be of several of the last quarter hours) is greater than the utility of the wage that he receives for it, and this whether the rate of pay is five or seven and one-half cents per quarter hour. If he were free to determine the length of his working day, he would, of course, work that many quarter hours less. But, as a matter of fact, he is not free to do this. He must either work the regular ten hours or not work at all. He naturally chooses the former, because the total utility of his entire wage (which means for him protection from hunger, etc.), is undoubtedly greater than the total disutility of the entire ten hours of labor.

In this way the disutility of the labor fails to operate as a correct measure, either for the amount of the labor supply or for the quantity of the product. It also fails in the same way as a correct measure for the height of wages and the value of the product. In so far as free competition may prevail in the determination of cost, the value of the product will vary with the wages paid, but it will not vary with the disutility of the labor. A careful examination of the actual facts of life will show that the influence of this disutility or pain of labor only appears in the following special cases :

(a) In the case of those goods that are produced outside of the time devoted to the regular occupation. An instance of this may be found in the making or repairing of tools during leisure time, these tools being intended, not for sale, but for home use. Their cost is the pain or disutility of the

labor devoted to them, and they will be valued according to the amount of this disutility.

(b) This is also true in the case of some regular occupations, in which men produce on their own account as artists and authors. It is also true in the case of industries carried on at home, where men are free to continue or to stop working as they may themselves determine. That the degree of their fatigue will exert an influence upon this determination may be granted.

(c) This is likewise true in those industries in which men voluntarily work overtime and receive special payment for the same. But such overtime is neither general nor fixed. It is a more or less temporary and exceptional arrangement, which only continues during the period of special pressure. Therefore the influence of this case upon the supply of labor and the value of the product is neither deep nor lasting.

(d) Differences in agreeableness or disagreeableness of the various occupations will (unless offset by other conditions) tend to give rise to differences in the rate of wages. Those which involve less than the average laboriousness or unpleasantness, or which have associated with them certain advantages or perquisites will yield a less than normal wage. Occupations of more than the average laboriousness or unpleasantness will, on the other hand, yield a more than normal wage. I must, however, expressly declare, that in these cases the absolute amount of the pain of labor does not determine the absolute amount of the wages. Differences in the disutility or pain of labor can only give rise to variations from a normal wage, and as we shall take occasion to show, this normal wage is determined by an entirely different set of conditions.

The influence of the laboriousness or disagreeableness of the labor is often greatly modified and in some instances is entirely offset by opposite tendencies. In Professor Marshall's "evil paradox" * we have one of the earliest

* "Elements," page 275.

recognized facts of our economic experience. This is the fact that unpleasant occupations, unless they demand some rare quality, usually bring in a wage that is not only no higher, but is oftentimes lower, than that paid in more pleasant occupations.

(*e*) Under normal wage I include the wage in all those occupations that do not require any rare or exceptional qualities. This, of course, includes the great mass of all occupations. With this understood, it becomes clear that the disutility of labor has but an indirect, and in one sense crude influence upon the absolute height of the normal wage. It undoubtedly prevents the introduction of an eight-hour labor day or even of a fifteen-hour day, but it has not been able to prevent the introduction of a thirteen or fourteen-hour day, as is shown by the history of the condition of the laboring classes. No one would claim that the progress of humanity from a thirteen to an eight-hour labor day has corresponded step for step with a similar progressive movement in the subjective feelings of the laborer. Nor will any one claim that the laborer will find in his wages an exact equivalent or recompense for the pain or disutility of his labor when he works thirteen hours per day. Again, when he works twelve hours per day, and so on for eleven, ten, nine and finally for eight hours per day. It is no nice variation in the point of equilibrium between utility and disutility that determines the length of the working day. It is the changing of the relative strengths of the various social factors that plays the principal part in this determination. This, within certain limits, which we cannot here stop to discuss, it will probably continue to do in the future.

(*f*) Finally the absolute height of the wages of skilled labor is manifestly still more independent of the disutility or pain of such labor. I take it that no economist would urge that this is the element which finally determines the salary of the higher officials, great actors or singers, specially skilled workmen, managers of factories, lawyers, doctors, etc.

These various points taken together certainly justify the assertion made above, viz., that the actual conditions which make possible an equilibrium of wages and pain, or of value and pain (so far as the value of the product is dependent upon the height of the wages), do not obtain in our industrial life. On the contrary, these conditions are only found in a relatively limited number of unimportant and exceptional cases.

This alone would be sufficient to show that in tracing the influence of disutility upon the value of goods, we have quite a different and indeed much narrower trail to follow, than that which leads to the great empirical law of cost. This may be shown in the clearest and most convincing way from several different standpoints, and with this we are brought to the second proposition advanced at the end of the preceding section. First, it may be shown that in many instances the correspondence of the value of goods with their cost, in the sense of the great empirical law of cost, not only does not imply that the value of the goods corresponds to the disutility or pain of labor, but actually excludes this assumption. Excludes it not merely by chance or temporarily, but of necessity and permanently.

In order to avoid needless repetition, we will take an example that is sufficiently comprehensive to include nearly all possible cases. In the production of nearly all wares there comes into play, besides the commoner sorts of labor, some better paid skilled labor. In the making of a common cloth coat, we will have the labor of some skilled cutter, or of a manager with a higher standard of life. Again, in the weaving of the cloth, we find the better paid labor of factory bookkeeper, manager, etc. If we go back to still earlier stages—the manufacture of the machines or looms, the mining or preparation of the steel, etc.—it is clear that the better paid labor of the engineer, foreman and manager will enter into the cost.

Let us now assume that the production of a cloth coat, including all stages, costs three days of common labor at

eighty cents and one day of skilled labor at one dollar and sixty cents. Let us also assume, for the sake of the argument, that the wage of eighty cents is an exact equivalent or recompense for the pain of a day's labor. If the amount of this pain of labor is to figure as the regulator of price, then under the above assumptions, the price of the coat should not exceed three dollars and twenty cents, for the skilled labor of the engineer or bookkeeper is not more painful than that of the common miner or tailor. Hence, if we take the pain as the standard, we cannot reckon the former as greater than the latter. And yet we all know that under the above assumptions, a cloth coat could not, for any long time, be put upon the market for less than four dollars (not including interest). This is manifestly out of proportion with the disutility of the labor. And yet, according to the law of cost, the price of the coat in the long run, and under conditions of free competition, should tend or gravitate toward this disutility.*

The lack of agreement of the cost, in the sense of the classical law of cost, with the disutility of labor, may be shown by approaching the question from an entirely different point of view. This brings us to an interesting counter test, which, if I am not greatly mistaken, has hitherto entirely escaped the attention of Economists.

We have occasionally remarked that the wages of skilled laborers, as a rule, are determined upon other grounds than the amount of pain which these persons endure. In particular

*We might compare the coat that cost three days of common labor at eighty cents and one day of skilled labor at one dollar and sixty cents with another coat that cost four days of common labor at eighty cents. If the law of cost is interpreted as meaning the sum of the pain or disutility endured, then these coats should have about the same value. It is manifest, however, that the fulfilling of the law of cost actually demands the opposite of this: that the coats should exchange in the ratio of ten to eight. The empirical law of cost is by no means the same thing as the regulation of price through the disutility of labor, and cannot be so. Or as Professor Green says in a paper on "Pain Cost and Opportunity Cost," "We shall certainly find that the rule of equal values for equal pains is not the law which actually determines exchange ratios."—*Quarterly Journal of Economics*, January, 1894.

cases, it is possible to find a justification for the casuistical assumption which regards utility and disutility as exercising an equal influence, both upon the remuneration of labor and the value of the goods produced. This is just as true as regards the ordinary carpenter or locksmith, as in the case of some famous artist, such as Titian or Van Dyck. In short, it is true of all men who, because of the scarcity of their talents, possess a sort of monopoly in the production of certain goods. How long they will work per day will depend, in part at least, upon the degree of fatigue that they must undergo. This, however, does not give us a fixed limit. How long a great artist will work depends, as in the case of the common laborer, upon several conditions. Among others upon the rate of pay that he can obtain for the product of his more prolonged effort. An artist may not be willing to work overtime to paint a picture, for which he will receive forty dollars. He might, however, not only willingly but gladly prolong his working day if he were offered four thousand dollars for the completed picture.

In short, there is nothing to prevent the producer of a monopoly good from so prolonging his day's labor, and thereby the daily supply of his monopoly ware,* until the marginal utility, of the money received for the last unit of labor time, is in exact equilibrium with the disutility of this last unit of labor time. It cannot be denied that under such circumstances the disutility exercises a determining or co-determining influence upon the amount of the supply, the height of the marginal utility, and the price of the product. This, too, is done in just the same way as in the illustration given in the last chapter, in which the ware was the product of common labor. At the same time, economists are agreed that such monopoly prices do not come under the classic law

*It would be easy to find many other and possibly better examples than that of the artist. In his case the artistic impulse is always strongly opposed to the action of the purely economic motives. Possibly the best example would be an inventor. He is in a position to produce a useful object, without any help from others, and is entirely free to determine the length of his working day.

of cost. Here again, as I believe, we are brought to the conclusion, that the disutility which we are investigating is something different from the cost which is operative in the empirical law of cost, and, therefore, that those economists are on the wrong path who think that the occasional agreement of value and disutility may be explained as a manifestation of the great empirical law of cost, and *vice versa*.

This erroneous confounding of two quite different phenomena has been, as it were, in the air of theoretic economics since the time of Adam Smith. The latter, according to the very apt and ingenious observation of Wieser,* really gives two parallel explanations of the phenomenon of value, viz.: a philosophical explanation, which is especially applicable to primitive conditions; and an empirical explanation, which is better suited to the more fully developed conditions of our present industrial life. Adam Smith also gives us two similarly related explanations of cost. According to the philosophical, he puts the personal pain associated with labor, "the toil and trouble," as the cost which really determines the price of the product. Later, in explaining his famous law of cost, which belongs to the empirical part of his theory of value, he holds that the "natural price" of the product gravitates toward the empirical cost. This, he declares to be wages of labor and interest.† To the mind of Adam Smith, of course, there was no opposition between these two explanations, and accordingly it was impossible to escape the conclusion, that, at least so far as labor is concerned, they really have to do with the same thing. By eliminating the modern economic conditions, as modified by exchange, we get the real kernel of the matter. And this kernel, according to the empirical law of cost, is nothing else than "the toil and trouble" of labor.

The well-known controversy that long monopolized the attention of the classical economists, whether the price of

* "*Der Natürliche Wert*," Wien, 1889, Preface, p. iii.

† "*Wealth of Nations*," Bk. i., Ch. v. and vii.

goods depends upon the quantity of labor expended, as Ricardo taught, or upon the amount of wages, as Mill correctly suggested, afforded ample opportunity to correct this error. They failed, however, to do so. The old Smithian "toil and trouble" remained in a sort of scientific haziness, until, through Gossen, and especially through Jevons, it was brought to full and clear recognition. Then, for the first time under the name of the "disutility of labor," it was raised to the rank of an elementary economic power, while its counterpart, the utility of the good, was set over against it. The old confusion, however, attached itself to the new names. If I am not greatly mistaken, not only the followers of the old classical school, but also many of the adherents of the newer theory, developed by Jevons, still stand under this ban.

In the case of Professor Macvane, the confusion is quite pronounced, as when he explains the cost of the classical law of cost as "pain of labor and fatigue of muscles."* Professor Edgeworth takes substantially the same position when he occasionally explains the "disutility" in terms of "cost and sacrifice."† Or when he sets first utility and cost,‡ and again, utility and disutility over against one another.§ Again, when he indulges in a polemic against the Austrian school of economists, and urges that they have neglected the great Ricardian law of cost and stripped it of its significance, and that they have not properly recognized the function of disutility in the determination of the economic equilibrium and the value of goods.|| Professor Marshall, as it seems to me, also becomes involved, to some degree, in this confusion. While Ricardo held that cost of production, and Jevons held that marginal utility was the determinant of value, Marshall holds that both enter

* "Marginal Utility and Value," pp. 262, 269.

† *Economic Journal*, June, 1892, p. 334.

‡ *Ibid.*, p. 335.

§ *Ibid.*, p. 337.

|| *Ibid.*, *passim*, especially p. 334.

into the determination of value, and that, like the two blades of a pair of shears, they are co-equal factors in this determination. Nor does he assume this position in any tentative way, but rather holds that he has found the solution for a problem long in dispute.*

No matter who is responsible for this confounding of the cost of the empirical law of cost with the disutility of labor, the fact remains that the confusion does exist. In order to distinguish as sharply as possible between the two principles referred to, I may remark that there is a rule which may be called the law of disutility, according to which the value of all goods that come under its influence tend to be in equilibrium with the amount of the pain involved in their production. But this is far from being the same as the great empirical law of cost. It depends upon quite different assumptions, and upon the play of other and intermediate motives. Finally, it has a different and much smaller field of operation. On the one side, it includes but a small part of the territory covered by the empirical law of cost, and on the other, it includes a certain portion of territory which is not covered by the law of cost.

This somewhat minute and pedantic, though none the less necessary, examination of the famous law of cost leads us to the following conclusion. The law of cost, as applied to the actual facts of our economic life, is susceptible of verification, in the sense that the synchronously reckoned cost, or the sum of the values of goods expended in production, coincides with the price of the product. Again, under the assumption that this synchronously reckoned cost can all be resolved historically into labor, it is possible to verify the proposition that the price of the product is determined by the sum of the labor expended, measured in terms of the *value* of this labor. But the law of cost is certainly *not* true in the sense that the price of those goods which are within

*"Principles," note on Ricardo's Theory of Cost in Relation to Value, Bk. vi., Ch. vi.

the domain of the law of cost is determined by the amount of the pain involved in their production.

V.

THE LAW OF COST AND THE VALUE OF LABOR.

I would now ask, and my colleagues of the Austrian school ask with me, what advance have we made toward a solution of our problem. Even though it be shown by means of the famous law of cost, that the value of freely reproducible goods may be resolved into the value of their means of production, or into the value of the most ultimate or elementary factor in production, *i. e.*, labor, we still must ask, what progress has been made in explaining the value of goods?

Manifestly this translation of the value of goods into the value of the means of production, does not give us the final solution for our problem, for we must still further inquire, how we are to determine the value of these means of production; or if we regard the means of production as resolvable historically into the labor previously expended, how are we to determine the value of this labor?

Let us proceed immediately to the consideration of the second half of our question. This will bring us at once to the root of the problem. For the sake of clearness I will accept as the basis of the argument the doctrines proposed by those who are in opposition to me in this matter.

In Professor Marshall's most admirable book which may fairly be taken as representative of the present status of economic theory in England, may be found several answers to the question: What determines the value of labor? In one place, he teaches that "free competition tends in the direction of making each man's wages equal to the *net product* of his own labor; by which is meant, the value of the produce which he takes part in producing, after deducting all the other expenses of producing it."* He also holds, that "the

* "Elements," Bk. vi., Ch. ii., § 2, and corresponding place in "Principles."

wages of every class of labor tend to be equal to the net produce due to the additional labor of the marginal laborer of that class. It may be remarked, that in obtaining the value of labor out of the value of the product of labor, one is in entire harmony with the conceptions of the Austrian school. What effect this has upon the law of cost will appear later on in the discussion.

In another place* Professor Marshall gives us quite a different standard for determining the value of labor. He holds, that in the case of every agent of production: "there is a constant tendency toward a position of normal equilibrium, in which the supply of each of these agents shall stand in such a relation to the demand for its services, as to give to those who have provided the supply a sufficient reward for their efforts and sacrifices. If the economic condition of the country remain stationary sufficiently long this tendency would realize itself in such an adjustment of supply to demand, that both machines and human beings would earn generally an amount that corresponds fairly with their cost of production."

I am not quite sure how wide an application Professor Marshall would give to this statement. This much, however, is clear, he would apply the distinction of the classical school, between the rapidly fluctuating "market price" and the "normal value" which is based upon cost, to the commodity—labor. In the passage just cited he manifestly wishes to indicate the standard according to which the normal or long period position of wages is finally determined. But as it appears to me, he is not quite clear whether he would make the efforts and sacrifices of the laborer the ultimate standard (as his expression, "sufficient . . . for their efforts and sacrifices," would seem to indicate), or whether he would take the cost of rearing and maintaining human beings as the standard (as the expression "amount that corresponds fairly with the cost of production of human

* "Elements," Bk. vi., Ch. v., § 4, and corresponding place in "Principles."

beings") would imply. Doubt may also arise whether it is his opinion that the *absolute height of wages* tends to an equilibrium with the "efforts" or "cost of production of human beings," or that the differences in wages to which these give rise are but variations from an average level, the absolute height of wages being determined by other considerations.

If this last is Professor Marshall's opinion, then I am in entire agreement with him in his conception of the value of labor. That differences in the pain of labor tend to bring about corresponding differences in wages, I have already admitted.* The same influence, and for quite analogous reasons, may be exercised by differences in the cost of producing human beings.

If, however, the expression is to be interpreted in the wider sense, that the absolute height of wages is finally determined by the pain of labor, or by the cost of producing human beings, then, as it seems to me, Professor Marshall has taken a position which cannot be maintained. This, so far as the pain of labor is concerned, I have endeavored to show in a previous chapter. In regard to the cost of producing human beings, a twofold objection suggests itself: First, this statement is hardly verified by experience, for modern economists are quite generally agreed that the "iron law of wages" cannot be interpreted as meaning that the necessary cost of maintenance is a fixed, definite amount, toward which the wages of labor must in the long run tend. On the contrary, they are agreed that the wages of labor may permanently exceed that amount, which hitherto has been regarded as the amount of the necessary cost of maintenance. And when this excess of the wages of labor above the cost of maintenance does disappear, it is really due to the fact, that the better conditioned laboring population have so accustomed themselves to the higher standard of life, that much that before was a luxury is now a necessity. In

*See above, p. 24.

an agreement between cost of maintenance and wages of labor obtained in this way it can hardly be said that the cost of maintenance is the determining, and the wages of labor the determined element.

Second, this last explanation is not satisfactory because it simply leads us around in a circle. According to this law of cost, the price of the means of maintaining the laborer (as bread, meat, shoes, coats, etc.), is to be explained by the value and price of the labor expended in the production of these commodities. If we start with this proposition, we can hardly continue, and say that the price of the labor is to be resolved into the cost or price of the means of maintaining the laborer. I have elsewhere dwelt upon the unsatisfactory nature of this explanation,* and so need not elaborate upon it at this point. Nor have I any ground for thinking that Professor Marshall and the other moderate representatives of the modern English school would accept the "iron law of wages" in any literal sense, with all the theoretic and practical consequences which this would involve.

Under these circumstances I do not believe it is possible to give a scientific explanation of the absolute height of wages, without some reference to that standard upon which, in the first of the above quoted statements, Professor Marshall seems inclined to base the market or demand price of labor. This is the marginal utility of the labor, or, otherwise stated, the value of the product of the last or marginal laborer. This explanation must, however, be supplemented in many and in part important details, by reference to the influence of the painfulness of labor and the cost of maintenance, though these can never entirely replace the above explanation. Even though for scientific purposes we were permitted to neglect the periods of short and moderate length, we could not explain those long periods to which we had limited ourselves without reference to other elements,

* In a paper, replying to Dietzel, on "*Wert, Kosten und Grenznutzen*," in Conrad's *Jahrbücher*, third series, book iii, p. 332.

besides the painfulness of labor and the cost of maintenance.

But we are not permitted, even for scientific purposes, to neglect these short and moderate length periods. On the contrary, any serviceable explanation of the value of wares, which could be included under the law of cost, must be based, clearly and distinctly, upon the actual rates of wages during the periods under consideration, periods which are really long, though they may seem relatively short. The important point is that wages during these periods still come under the influence of that determinant, to which Professor Marshall refers as the "demand price for labor."

This point is just as important as it is simple. In order to convince ourselves of its truth, we need only keep clearly in mind what it is, that the law of cost really accomplishes, in relation to the price of goods, and how this result is brought about. The typical effect of the law of cost is to change the chance and uncertain fluctuations which the price of goods undergoes, into a regular oscillating motion like that of a pendulum. In this motion the price always tends to return to the cost as to an ideal resting-place. Though the price seldom remains for any long time at this point, yet in a general way this might be called the normal position about which the price oscillates.

The wonderfully simple mechanism by which the law of cost brings about this result is as familiar as the law itself. It rests upon the very simple motive of self-interest. If in any branch of production the price sinks below the cost, or in other words, if the market price of the product is lower than the value of the means of production, men will withdraw from that branch and engage in some better paying branch of production. Conversely, if in one branch of production, the market price of the finished good is considerably higher than the value of the sacrificed or expended means of production, then will men be drawn from less profitable industries. They will press into the better paying branch of

production, until through the increased supply, the price is again forced down to cost.

The law of cost operates, therefore, by changing the occupation of the productive power.* So long as the price tends to cause a change in the occupation of the productive power, it is itself not in a state of equilibrium. On the other hand, a condition of at least relatively stable equilibrium will be attained when in the different branches of production the price has so adjusted itself that the productive power does not tend to change its occupation. This would be the case, when, in all kinds of employment, equal labor received equal pay and unequal labor received proportionately unequal pay. Then the differences in pay could be regarded as a just equivalent for the special laboriousness or disagreeableness, or for the special skill or fidelity, etc., incident to certain occupations. Equal capital would everywhere receive the same rate of interest. Any excess above this could be regarded as a just equivalent for the greater risk, etc., incurred in that particular investment. We may, for example, assume that this point of equilibrium is reached, when in all branches of production the wages of an unskilled laborer are eighty cents, and the rate of interest on capital is five per cent.

Under this supposition the normal price, toward which according to the law of cost the market price gravitates, should be such as would correspond with an average wage of eighty cents, and a rate of interest of five per cent. The price of a commodity that costs three days of common labor would, according to the law of cost, gravitate toward two dollars and forty cents (interest being ignored). This would be true, whether or not this equalized rate of pay of eighty cents corresponded to the minimum of existence. It may be

*The change of occupation is not always brought about by individuals abandoning the occupations in which they are engaged. When in any branch of employment the decrease from death, etc., is not offset by the number entering the same, we have a change of occupation. Those who make up the difference have gone into other lines. Though operating more slowly, the effect of this is the same as if individuals made a direct change.

that when the minimum of existence is only forty cents, the rate of wages will not remain at eighty cents. A generation later it may sink to sixty cents, or even to fifty cents. While this would show that there is no fixed and absolute normal price,* it does not alter the fact that at the present time the price of the commodity, according to the law of cost, gravitates toward that price, which would give the laborer a wage of eighty cents. When we examine this gravitating motion more closely, it is manifest that we cannot say that "the price gravitates toward the rate of eighty cents," because the laborer's cost of maintenance is forty cents. Instead we must say, that the price gravitates toward the rate of eighty cents, because the rate of wages which obtains throughout the whole field of employment is eighty cents. In other words, in explaining the oscillating motion of prices, according to the law of cost, we cannot avoid assuming as a basis, a certain average or normal rate of wages as the prevailing rate for the period under consideration.

We will now repeat the question which was asked in the beginning of this chapter, a question which must be asked

*Professor Marshall has very correctly remarked that the use of the term normal is more or less arbitrary. A price which we would call normal, when we have in mind a period of a certain length, we would not call normal when considering a longer period ("Principles," Bk. vii., Ch. vi., § 4). Otherwise I would certainly insist that the real law of cost has to do with no longer period than is sufficient to allow the adjustment of the price of the ware to the equalized position of wages (and interest); the wider adjustment of the wages of labor to the cost of maintaining the laborer, which under certain circumstances might require a still longer period of time, is an entirely different problem. So far as this can be further maintained as a general law, it is in no sense an effect of the real law of cost, but should be regarded as the effect of another law—a law which has no actual connection with the real law of cost. It depends upon the action of quite different forces and in its results has but an external or non-essential similarity, which has led to the unqualified evil of confounding these two laws. The impelling motive of that law of cost, which really influences the price of wares, is usually a shrewd estimating of economic conditions, the striving for the greatest possible utility and the avoidance of harm. The motive of a pretended iron law of wages is on the one side the irresistibility of sexual desire, and on the other the great mortality which results from insufficient food. But the effects of such natural forces can no more be credited to the vulgar economical law of cost than the aggregation of a great number of men in large cities can be credited to the law of gravitation, which of course, because of a similar play upon external analogies, has already been maintained by Carey.

if our explanation is to maintain a logical and coherent form: Upon what does this average or normal rate of wages, prevailing at any given time, depend?

We have already answered this question, or rather Professor Marshall has answered it, in the first of his explanations of the rate wages already quoted. In this he has declared, and we must perforce agree with him, that the price of a day's labor depends upon the value of the pure product of a day's labor. Or more correctly, upon the value of the product of the last employed laborer, in Professor Marshall's example the "marginal shepherds."*

This answer brings the whole doctrine of the law of cost to its final test. Upon the one side, this analysis of cost practically abandons the attempt to show that disutility is the essential element of cost. On the other side, the expression "value of the products of labor," makes manifest that we have not yet obtained the ultimate element, and that the analysis must be continued still further. Finally, the explanation seems even more than before to continue in a circle. In the name of the law of cost we explain the value of the product by the value of the labor expended in its production, and then explain the value of this labor by the value of the product.

There is manifestly a great discrepancy somewhere in this explanation. A discrepancy which the Austrian economists endeavor to avoid by a special interpretation of the law of cost.† Their efforts, of course, will not receive much encouragement from those writers who do not recognize the existence of this discrepancy. This includes the great

* I would not fail to mention that the position of wages which corresponds to or equals the "net product of the last employed laborer" is, according to Professor Marshall's views, in no sense a temporary market price, but a sort of "long period price," which requires for its development a more or less prolonged leveling process. It is a sort of centre of gravity for the oscillations of the supply and demand of labor.

† In this attempt Wieser has taken a prominent part. Compare his "*Ursprung und Hauptgesetze des Wirtschaftlichen Wertes*," 1884, page 139; and "*Der natürliche Wert*," 1889, page 164. Compare also the excellent résumé by Smart, in the editor's preface to the English edition of the last named work. London, 1893, p. xix.

majority of those who hold, wittingly or unwittingly, that the explanation of the value of goods in accordance with the law of cost is firmly anchored upon the elementary factor, "disutility." That this is not the case, I have endeavored to show; and I will now attempt to bridge the gap in the explanation of value, which my investigation has revealed. On the one hand it is held, that in numerous cases the price of the product, according to the law of cost, oscillates about some normal rate of wages, which rate does not correspond either to the "disutility" of labor or the cost of maintaining the laborer. On the other hand, Professor Marshall, in common with many other English and American economists, admits that the normal rate of wages is adjusted according to the value of the product of the last employed laborer.

VI.

WHAT THE LAW OF COST REALLY MEANS. FINAL RESULT.

The existing productive powers, inclusive of the most original and important of all—labor—seek employment in the various opportunities for production that present themselves. Naturally, of course, they first engage in those branches of production that are most profitable. But as these are not sufficient to give employment to the whole productive power, some of this power must engage in successively less productive occupations, until finally all of it is employed. This gradual extension to less profitable occupations may be seen in the production at one and the same time, of more valuable goods, and of others, which from the very beginning were less valuable, because the demand for them was less urgent. But the important case of this gradual extension to less profitable employments is found elsewhere. In any branch of production which hitherto has been very profitable, the amount produced tends to increase. Hence, according to well known principles, we are compelled to market the increased product at a diminished price.

The demand arranges itself in strata that vary with the desire and purchasing power of the consumers. Let us assume that of a certain kind of commodity, thirty thousand pieces are produced by one hundred laborers with an outlay in labor of one day out of the three hundred working days in the year. Let us further assume that these are marketed at the price of eighty cents each. There will then be among the purchasers possibly one thousand to whom eight dollars per piece would not have been too dear, either because it satisfied some pressing want, or because their great wealth makes the value of the monetary unit exceptionally low in their estimation. Then come perhaps, five thousand more purchasers who, in case it is necessary, are prepared to pay two dollars. Another six thousand, who, in an extreme case, would pay one dollar and sixty cents. Another six thousand who would pay only one dollar and twenty cents. Again, another six thousand who, at most, will pay only one dollar, and finally, the last six thousand who are prepared to pay only eighty cents. Below these comes, perhaps, another group of six thousand who would be willing to pay sixty cents, but for whom the prevailing market price of eighty cents is too high, and who, therefore, must decline to purchase.

Assuming the conditions of this example, a product of thirty thousand pieces corresponds to a market price of eighty cents. But manifestly, if the productive power were less; if, for instance, the number of laborers was only eighty and the amount produced only twenty-four thousand pieces, the market price at which the whole product would be sold might be one dollar. It is equally clear that with one hundred and twenty laborers and a product of thirty-six thousand pieces, the market price might not exceed sixty cents. In other words, the value of the product of one laborer when eighty laborers are employed, would be one dollar; when one hundred are employed, eighty cents, and when one hundred and twenty are employed, sixty cents. In the same way,

the market for the product of every additional laborer above one hundred and twenty must be found at a still lower point in the demand scale. Or at any given time there is a group of the least capable or willing buyers that corresponds to the last employed group of laborers. The valuation of this group of buyers determines, in the first instance, the value of the product of the last group of workers; and through this, since at the same time and in the same market, there can be but one price for the same product, the value of the product of every laborer in this branch of production.*

It even goes further than this, and determines the wages of the laborer. On the one side, no entrepreneur will, for any long period, pay his laborers more than he can obtain for the product of their labor. The value of the product will, therefore, be the upper limit of the rate of wages. Again, under conditions of free competition, he will not for any long time pay them less, for so long as the market price is in excess of the cost of production,† the entre-

* Professor Marshall, in his example of the marginal shepherd, has made a very useful application of this concept of the last employed labor, though in a somewhat different direction. The increase of product which results, when, without increasing the capital, we employ an additional laborer, he conceives to be the answer to the question, How much of the total product may be regarded as the product of labor, as opposed to product of capital? Professor Marshall also allows the last employed laborer to play a part in the question of the relation between the laborer and the capitalist, or in the question of the division of the price of their products; I, on the other hand, do not allow the last employed laborer to play any part in the question of the relation between laborer and consumer, or in the question of the determination of the height of the price of the product. Nevertheless, I believe there is no material difference in our positions. The truth is, that the "last employed laborer" in both cases plays the rôle ascribed to him. But since I have expressly excluded all factors of production except labor (see above page), there was no occasion for me to speak further of the division of the product between the laborer and the capitalist. In my book on "Capital," I have given special attention to this question. In our present discussion, we would not insist upon every point involved in that abstraction. (See page 11.)

† I beg the reader not to forget that in this investigation we ignore all factors of production except labor, especially the so-called abstinence. If we did not do so, we would somewhat complicate our example. Besides the cost of labor, we would have to take account of the cost of abstinence, must then subtract this latter from the market price. Then all conclusions, which we have here developed for the relation between the total market price of the product to the wages of labor, would have to be developed, for the relation of the market price of the product, diminished by the other costs of production, to the wages of labor.

preneur obtains a profit; but he or his competitors will be tempted by this to increase their production, and so to employ more laborers, until the difference between the valuation of the last buyer and the wages of the last laborer disappears.

The same forces, which, in every branch of production, tend to fill the gap between the value of the product of the last employed laborer, and the rate of pay in this branch of production, tend also to fill another gap. Under conditions of perfectly free competition, there cannot, in the long run, be any serious difference in prices or wages in those branches of production, that are in free communication with one another. In the long run, the product of a day's labor and the labor itself cannot have a value of one dollar and twenty cents in the woolen industry, for instance, and only forty cents in the cotton industry. This would immediately give rise to a tendency in the productive forces to change their occupation, a tendency which would continue to operate until both of these branches of production, together with all others in communication with them, had been brought into a condition of equilibrium.

But where will this point of equilibrium be? This must be decided within that general field of employment which includes all the freely communicating branches of production; and it must be decided upon the same grounds or reasons which we have found to be effective for a single branch of production. There is a total or aggregate demand for all the products of labor. This is as limitless as our desire for well being, for enjoyment or for the possession of goods, and is graduated according to the intensity of this desire. If our desire for any product is very intense, and our means of payment abundant, then to us the marginal utility of the product will be high, while the marginal utility of money will be low. In other words, we will be willing to pay a higher price for this product than we would if our desire for it or our ability to pay for it were less.

Hence, in the general, as in any special field of production, there may be several strata of demand. There may be one which in an extreme case would be willing to pay eight dollars for the product of a day's labor. Another might be willing to give two dollars, while others would find their limit at one dollar and sixty cents, one dollar and twenty cents, at one dollar, and at eighty cents. There may remain still others who desire to purchase, but whose wants are not sufficiently pressing or whose purchasing power is so limited that they either will not or cannot pay more than fifty, forty or twenty cents, and even less, for the satisfaction of that want to which the product of a day's labor would be devoted.

To meet this practically unlimited demand we have a labor power which in comparison with this demand is always limited. It is never sufficient to satisfy all our desire; if it was we would be in paradise; we must, therefore, always choose which of our desires we will gratify. Under the influence of self-interest we will satisfy them according to the height or amount of the fee which we are willing to pay for their satisfaction. That stratum of the demand which is prepared to pay eight dollars for a day's labor will not suffer any inconvenience for lack of the desired commodity. So, too, that stratum of the demand which is willing to pay two dollars will not suffer any inconvenience. Nor will those suffer that are prepared to pay one dollar and sixty cents, one dollar and twenty cents, one dollar, etc. But the point must finally be reached where such satisfaction cannot be obtained. This point will, of course, vary with the circumstances or conditions of particular lands or times. Here eighty cents, there sixty cents, and elsewhere forty or even twenty cents, but such a point will always and everywhere be found. Let us assume a concrete case in which this point is at eighty cents. The existing productive power is here fully employed in the satisfying of those wants, for whose satisfaction we are willing and able to pay eighty cents for a day of common labor. In this case the stratum

of the demand whose valuation is eighty cents is the last stratum for the satisfaction of whose desires the last laborer is active.* It is the valuation of this stratum which determines both the value of the product and the wages of labor. All those desires for whose satisfaction we are either unwilling or unable to pay at least eighty cents must remain unsatisfied. This on the one hand will affect some of the unimportant needs or desires of the well-to-do class, on the other, alas, it will affect many of the more important needs of those whose means are limited, whose entire purchasing power has been exhausted in providing for still more pressing wants.

Let us now assume that, under otherwise unchanged conditions, there is an increase in the number of laborers entering into the problem, say through the sudden abolition of the standing army, or through a great influx of laborers from other lands. The additional laborers must and will find employment in providing for a still lower and hitherto unsatisfied stratum of the demand, that stratum, for instance, whose valuation is only seventy cents. This stratum is now the lowest for which the last laborer is active, and its valuation determines both the value of the product and the wages of labor.†

* The fact that there are always a number of laborers out of employment tells in no way against my contention; it is a result, not of an excess of labor force, but of those never-failing disturbances of the organization of the entire, yet insufficient, supply of the labor forces.

† For the sake of the critical reader I would here remark that I am well aware that if we assume an increase in the labor forces we cannot at the same time assume that the other conditions remain entirely unchanged. The increase in product which results from an increase in the number of laborers will also bring with it an increase in the purchasing power or in the demand. But if, as in the text, we assume that with an unchanged condition of capital and land, the labor alone is increased, the increase in the demand for labor and the products of labor would not be strong enough to completely compensate the increase in the supply of labor, for the increase in product thus obtained cannot be wholly applied to the indemnification of labor, some fractional part of it must be given as tribute to the other co-operating factors in production, Capital and Land, for these factors have, under our supposition, become relatively scarcer than the factor, Labor, and so are in a position to insist on the payment of this tribute. It results from this, that this increased product of labor can no longer be taken up by that stratum of demand,

What, under these conditions (the statement of which I hope will meet the approval of my honored English and American colleagues), is the rôle played by the law of costs? An exceedingly simple one. It guarantees that the existing productive power shall be directed to the satisfaction of the existing needs, according to the height of the fee which they are able and willing to pay. It brings about for the productive power in an indirect way, just what occurs in the case of the finished product in a direct way, upon every open market the supply of the finished product goes as far as it will reach to the best paying of those who desire to purchase. The market price of the same ware, on the same market, at the same time, is uniform. This fixes, very clearly and definitely, the boundary between those who are willing and able to purchase at that price, and those who are willing to do so but not able. If, for instance, the market price is eighty cents, then all those to whom the money marginal utility (*Geldgrenznutzen*) of the commodity is eighty cents, or more, will provide themselves with the commodity, all those to whom the money marginal utility of the commodity is less than eighty cents must deny themselves this commodity. No one will intentionally reduce the price of his commodity, to those who are willing and able to pay one dollar and twenty cents, in order to favor those who will or can pay only forty cents.

This same function is performed for the productive power by the law of cost. The latter does not meet the consumers and their needs directly; it does not come in contact with them upon a common market; but it reaches the public through the money price which the public puts upon the

which can pay eighty cents, but must find its market in a deeper, though it may be only a little deeper, stratum of the demand. I would also remark, that the question touched upon in this note is a most difficult and complicated one,—it contains, perhaps, the most difficult part of the difficult theory of wages,—and that I do not for a moment think that I have exhausted the subject with these rather brief, and I fear somewhat obscure remarks. I would only call attention to the fact that I have not lost sight of a difficulty, the complete exposition of which would lead us too far afield.

finished product. This competition (*Werben*) is extended over as many parts of the general market as there are different kinds of products. But this competition, though widely diffused and indirect, eventually results in the establishing of a certain market price for the productive power. This market price of the productive power appears in each single branch of production as the cost of the same. It operates like a speaking trumpet through which the supply price in other and distant parts of the general market is made audible in the part where we are situated. Those interested in one part are notified of the conditions which obtain in the general market and are thus enabled to govern their actions according to these more general conditions.

Let us now return to our example. We will assume that, in the general field of production or employment, the market price of the product of a day of common labor, and thus the wages for a day of such labor is eighty cents. We will also assume that in some special departments, as cotton manufacturing, because of some unfavorable combination, the value of the product of a day's labor has fallen to sixty cents, while at the same time, the wages of labor being eighty cents, the cost of production is eighty cents. What is the meaning and effect of this rate of cost of eighty cents? It does not mean that the laborer cannot live on less than eighty cents; or that the labor involves a degree of disutility which he will not endure for less than eighty cents. It means, and that quite clearly, that there are enough people in the world who will give eighty cents for a day's labor, or for the product of the same, to keep all the productive power active, and therefore that it would be foolish to ignore this offer, and employ the productive power in the service of people who are able and willing to pay only sixty cents for a day's work.

Let us now assume, that in the woollen industry the product of a day's labor, through some favorable combination, is worth one dollar and twenty cents, while the cost is only

eighty cents. This is clearly nothing else than advice to those interested, that in the general field of employment a day's labor cannot obtain more than eighty cents, and therefore that it is wise to listen to the favorable offer that we have been ignoring, namely, the offer of those people who are willing and able to pay for the product of a day's labor in the woolen industry, not indeed all of one dollar and twenty cents, but something more than eighty cents. This advice bears fruit through the action of the watchful self-interest of the entrepreneurs. In obedience to the law of cost it levels the abnormal prices of sixty cents and one dollar and twenty cents, that prevail in different parts of the general market, to the normal price of eighty cents. This means nothing more than the bringing about of that disposition of the productive power, which insures that the best paying wants shall always be satisfied first. At the outset, according to our illustration, those needs whose money marginal utility was eighty cents and sixty cents were satisfied, while those whose money marginal utility was between eighty cents and one dollar and twenty cents remained unsatisfied. Eventually a readjustment is effected so that everywhere and in all branches of production, the productive power is employed in the service of the best paying wants. This takes place successively from the highest down to those whose money marginal utility is eighty cents. We may conclude then, that in this and in all similar cases the law of cost has no other function than to bring all products of equal origin into line with each other. The self-evident proposition that the same product, on the same market, at the same time, must have the same value or price, is extended by the law of cost a step further, and gives us the proposition that products of like origin must have the same value or price. But how high this value or price will be, neither proposition informs us. The self-evident proposition, that one bushel of wheat has the same value as another similar bushel of wheat—gives me no starting point from

which I can determine the value of both bushels. In the same way, in the cases described, the law of cost gives me no starting point from which I can determine the absolute height of the price line; to which, according to that law, the price of all products of equal origin are brought. When we take a certain limited view of the question we do seem to get an answer. As when we confine ourselves to a single branch of production and think of the amount of the cost as something that we determine independently of our problem. But we might just as well argue, in the case of our two bushels of wheat, that according to our proposition, one of these bushels has just the same value as the other. We also *know* that number one is worth one dollar, therefore, according to our proposition, number two is worth one dollar. But the value of number one is just as much a subject for investigation as the value of number two, and hence, our answer does not give us the value of either. This is true of the height of the cost in every branch of production. We must, in every case, go back of the apparent answers until we find the real answer. In the case of the two bushels of wheat this answer lies close at hand, but in the case of costs in general, we must survey the whole field of production and finally find our answer in the following elementary proposition:

There is a certain limited quantity of productive power which at any given time, under the conditions set by the technical development of that time, can bring forth only a certain limited quantity of products. These products, through the action of certain leveling influences in the different branches of production, are disposed of in a regular order of succession, in each case, to the best paying purchaser. The satisfaction extends downward in the scale of wants until a certain equalization to the (money) marginal cost of production is attained, and it is this which decides the value of all goods that come under the dominion of that leveling influence. It determines the value of the products as well as the value of the productive power, which is represented by the cost.

The representatives of the English theory have chosen the figure of the two blades of a pair of shears, in order to show the opposition between the English and Austrian conception of the law of cost. I gladly follow them in the use of this figure but with the conviction that the interpretation which my English colleagues have given to it, must be supplemented as follows:

In the case of freely reproducible goods, it is undoubtedly true that the price is fixed at that point where the money marginal utility of the commodity to those desiring to purchase it crosses the line of the costs. In our example, the last purchaser of wool will be the one whose valuation will correspond with the amount of the cost, or with eighty cents. In this case it is entirely correct to say that utility (relative marginal utility for those desiring to purchase) and cost operate together in the determination of price, like the two blades of a pair of shears.

But now follows the unavoidable question: What determines the amount of this cost? The amount of the cost is identical with the value of the productive power, and, as a rule, is determined by the money marginal utility of this productive power. This, of course, has reference to the existing conditions of the demand for and supply of this productive power in the various branches of production. If in the above formula we substitute for "cost" this explanation of cost, we would have the following: "The price of a definite species of freely reproducible goods fixes itself in the long run at that point where the money marginal utility, for those who desire to purchase these products, intersects the money marginal utility of all those who desire to purchase in the other communicating branches of production."

The figure of the two blades of a pair of shears still holds good. One of the two blades, whose coming together determines the height of the price of any species of product, is in truth the marginal utility of this particular product. The other, which we are wont to call "cost," is the marginal

utility of the products of other communicating branches of production. Or, according to Wieser, the marginal utility of "production related goods" (*produktionsverwandten Güter*). It is, therefore, utility and not disutility which, as well on the side of supply as of demand, determines the height of the price. This, too, even where the so-called law of cost plays its rôle in giving value to goods. Jevons, therefore, did not exaggerate the importance of the one side, but came very near the truth when he said "value depends entirely upon utility."

Almost, but not quite entirely, for as I have endeavored to show, and as Jevons well knew, disutility plays a certain part in the determination of value. A part, however, which, in our actual economical conditions, is quantitatively unimportant. It occurs in full force only, in the case of the few and unimportant products of our leisure hours. For the great mass of products which are the outcome of our regular occupation, this disutility either does not appear, or is only a very weak and remote element in the complex standard that determines the "height of the cost."* If we were to put this roughly into figures, we might say that the ten parts of that blade which represents the demand consist entirely of *utility*, while of the blade which represents the "cost," nine parts are utility and only one part disutility. On the whole then value depends nineteen-twentieths on utility, and only one-twentieth on disutility.

We must now consider a circumstance, which thus far in our argument we have intentionally ignored. Up to this point we have confined ourselves to those conceptions of the law of cost which come nearest to harmonizing with those of our opponents, namely, those which declare that there is a correspondence between the price and the historically reckoned cost, *i. e.*, the cost elements, labor and abstinence. It was only in this way that we could eliminate all those intermediate members, raw material, wear and tear of tools, etc.,

* See above page 24.

which in practice appear as part of the cost, and in common with most of our opponents, speak of labor and abstinence as the determining factors of cost.

We must not, however, forget that there is a second sense, in which the law of cost is susceptible of empirical demonstration, namely, the sense in which the law of cost asserts a correspondence between the price and the synchronously reckoned money cost of the entrepreneur.* When we carefully consider the historical and synchronous method of reckoning cost in their relations to each other, it is manifest, that while there is some connection between them, yet they are not entirely the same, either in their content or in the extent of their sway. The correspondence of the price with the historically reckoned cost involves the satisfying of much more severe and unusual conditions. The leveling feature, upon which both rules rest, must here operate unhindered through the whole of the complex system of production, down to the last elementary root. On the other hand, the gravitation of the price, toward the synchronously reckoned money cost of any particular stage of production, merely assumes that the leveling influence has free sway in this part of the productive process. The gravitation toward the synchronously reckoned cost is to a certain degree more readily satisfied. For this reason it is more frequently operative, and hence there is a wide district, subject to its sway, which is not subject to the sway of the historically reckoned cost.

There are numerous instances in which the synchronously reckoned cost of a single stage of production is effective in determining the price of the product, although there may be no correspondence between the price and the historically reckoned cost. This may be due to the fact that the leveling influence may be temporarily inoperative through all stages of production, or though free for part of the distance, it may at some point be permanently hindered by some kind of a monopoly.

* See above page 15.

Let us illustrate this by an example. The production of one hundred weight of copper costs at a given time ten days of historically reckoned labor at eighty cents a day or eight dollars. This, of course, enters into the cost of all copper goods, and therefore into the price of copper wire, copper kettles, copper pans, etc. Now, because of a strong demand for electric wire the hundred weight of copper advances in price from eight to twelve dollars, nothing is more certain than that the coppersmith, the money cost of his material having risen, will advance the price of copper wire, etc. A copper kettle which weighs one hundred pounds and the production of which involved an expense of six dollars, had in the past a total cost of fourteen dollars; it now has an additional cost of four dollars and so must bring at least eighteen dollars, and this quite independently of the question, whether or not the historically reckoned cost of production has changed; whether ten or any other number of days of labor have been expended in its production; or whether we pay eighty cents or any other amount for a day's labor.

The fate of the "historically" reckoned cost will likewise depend upon a variety of considerations; difficulty may be encountered in producing the additional amount of copper which is necessary to supply the increased demand. It may be necessary to employ more miners, in which case it is quite probable that the wages of the miners will advance. Or, perhaps, though we can obtain a sufficient force of miners at eighty cents, it may be necessary to work poorer veins, in which a hundred weight of copper will cost not ten but twelve days' labor. In both cases the advance which first appeared in the money cost of a later stage of production, will be gradually transmitted, in greater or less degree, to the elementary labor cost of the earlier stages of production. Finally, it is possible that we may be able to supply this increased demand for copper without any additional cost, or at the old rate of ten days of eighty cent labor to every hundred pounds of copper. In this case the increased

demand for copper will eventually be satisfied at this rate of cost. The price of the copper, as well as that of the copper goods, will then have a corresponding return motion until it reaches the original price of eight dollars.

But in either event, it still remains true that the price of copper goods may be determined, at least temporarily, by other conditions than their historically reckoned cost. In practice numberless instances of this kind arise. Even though in the long run the elementary "historical" cost plays an important part, yet time is necessary for its influence to be felt through the whole of our complicated system of production. During this time the stages not yet effected by this leveling influence will follow the lead of their special "synchronous" cost.

Let us now take a few examples, in which this leveling influence is free to operate over a limited area of the process of production, and then at a certain point becomes permanently inoperative.

Take a chemical product, which we will assume to be sold at any given time, at its actual cost of production, say eight dollars. Let us further assume that some discovery is made by which the cost of this material is reduced to four dollars, and that the discoverer patents the process and allows others to use it for a fee of two dollars. The price of this product will now permanently adjust itself to a money cost of six dollars, which exceeds the elementary cost of four dollars by the amount of the patent fee or royalty of two dollars.

Let us take another case, and assume that a hundred-weight of coffee, when admitted into a country free of duty, will sell at a price which is just sufficient to cover its cost of production, which we will assume to be sixty-five dollars. Let it now be subjected to an import duty of fifteen dollars. The price must, of course, be high enough to cover this additional cost, and therefore, will rise to eighty dollars, an amount which exceeds the elementary cost by fifteen dollars.

Here we have two typical examples of price variations, which will be found to include nearly the entire field of price phenomena, for there are at the present time very few products in which some patented machine or process, or some import duty on raw or auxiliary material does not play a part.

It is now time to ask: What has our theory to say about the determination of these prices of copper kettles, chemical products, coffee, etc.?

It must offer some explanation of these facts, since they are of such frequent and general occurrence. It is also manifest that it cannot explain them in terms of the elementary cost of labor and abstinence, nor in terms of the value of these elementary factors of cost, nor by a reference to the disutility which may be associated with the same. The price of the copper kettle has advanced from fourteen dollars to eighteen dollars, and the price of coffee from sixty-five dollars to eighty dollars, not because, but in spite of the fact, that the elementary costs have remained unchanged at fourteen and sixty-five dollars. Again, in the case of our chemical product, if the price depended upon the elementary cost, it should not stop at six dollars but should sink to four dollars. It is equally clear that all these cases of price variations are subject to the law of cost and are actually effects of this law. It would, indeed, be a very serious sin of omission, on the part of economic science, to attempt an explanation why the present prices of the several commodities mentioned in our illustration are just eighteen, six and eighty dollars, without any reference to the characteristic circumstance that these prices represent the present cost to the entrepreneur, and instead, content itself, with a vague reference to the relation existing between the supply of, and demand for these commodities.

The same considerations which in the past have forced us to supplement the general law of supply and demand through the more exact law of cost, makes it necessary to so interpret

the law of cost that it may include and explain the above variations in prices.

What now remains to be done? In our opinion, just that which the Austrian economists have endeavored to do.

The conception of a historically reckoned cost must be brought face to face with the conception of a synchronously reckoned cost, and due importance must consciously be given to each of the two conceptions. These two conceptions may, indeed, be put side by side, but are in no sense interchangeable. For the solution of different problems in our science, both conceptions are necessary. It is even necessary to distinguish between the different varieties of the "historical" cost. For certain explanatory and speculative purposes, it is well to have in mind the disutility of labor. In other cases (as in estimating certain technical advances in production), it is the quantity of labor that we must consider. In still others, it is the value of the labor that we must inquire about. There is not, as Professor Macvane thinks, only one "true conception" of cost. Professor Patten, although his limitations are not entirely satisfactory, comes much nearer the truth when he says that the competing concepts really belong to different branches of the theory, the one to the "theory of value" and the other to the "theory of prosperity."*

Again, we must not endeavor to find in the law of cost either more or less than the Austrian economists have found in it, namely, a universal law of leveling. And this is an influence which operates not merely upon certain final elements, but also at every stage of the productive process. There is a leveling or equating not merely of the final elements, labor and the disutility of labor, but also of productive goods and of utility with utility. This last takes place independent of, and oftentimes in direct opposition to the influence of the final elements. Why, in our example of the copper kettle, does the price rise from fourteen to eighteen

* "Cost and Expense," page 67. ANNALS, May, 1893.

dollars? Simply because through the common cost it can and must be leveled to the price of the other commodities produced from copper, *i. e.*, in this case to the price of the strongly demanded copper wire. But why have prices in the entire copper business advanced? Because, and in so far as, through the increased demand for copper, the marginal utility of this material has been raised. It is, therefore, an increase in utility and not in disutility, that here in the guise of cost dictates the advance of the price. The numerous instances of this kind which at once suggest themselves to the reader, confirm our earlier judgment of the important part which, under modern economic conditions, utility plays in the determination of cost.

It is a curious fact that the objection has been more than once advanced, that the Austrian economists have closed their eyes to the rich treasure of insight and knowledge which the great law of cost affords;* and that they have disdained to avail themselves of its help in the explanation of the phenomena of value. In reality as we have endeavored to show, the reverse of this is true. So anxious are we to coin the whole of this treasure, so strong is our desire not to neglect or discard one particle of the help which it offers us, that we object to a misleading interpretation of this law, an interpretation which would compel us to ignore the greater part of its influence. The character of the facts as well as the necessities of the science force upon us, as we believe, with equal imperativeness, the other universal concept, the concept which the Austrian economists have made their own, and whose essential features I will in conclusion recapitulate.

The variety of meanings that have attached themselves to the word cost have been the source of much confusion. There is, for instance, the cost, which, in the sense of the

* Compare for example B. Dietzel's writings, especially the paragraphs cited in my answer (Conrad's *Jahrbücher*), third series, book iii, page 327. See also Professor Edgeworth in the *Economic Journal*, June, 1892, pages 334, 337.

great empirical law of cost, operates as the determinant or regulator of price. To identify this either directly or indirectly with the personal sacrifice, laboriousness, pain or disutility that is imposed upon us by labor or abstinence, is an actual misunderstanding.

The "cost" of the law of cost is not the name of an elementary factor. It is a designation applied indifferently, according to the special circumstances of the case, either to sacrifice utilities embodied in goods, or to personal discomfort or pains, *i. e.*, either to utilities or to disutilities. The law of cost is always in the first instance a simple leveling principle. In order to determine what elementary forces are included under this title, we must inquire what it is, that under the name of cost, brings about this leveling. We then find that at first the marginal utility of one product is leveled to the marginal utility of other products, that are produced from the same cost good (raw material, machines, etc.), or it is a leveling of utility with utility. In most cases this leveling process not only begins but ends here. Only occasionally, under quite definite casuistic assumptions, is the leveling process carried a step further, and the utility of the good itself brought into equilibrium with the disutility endured by the producers. In this limited number of cases the general law of cost becomes a special law of disutility. The independent character of this law is shown by the fact, that while its domain is very limited, yet in one direction it extends beyond that of the classical law of cost.*

What then is the "ultimate standard" for the determination of the value of goods, in the search for which, men have been as indefatigable during the last one hundred years, as they formerly were in their endeavors to square the circle. If we wish to answer this question in a single phrase, then we cannot choose any less general expression than "human well-being." The ultimate standard for the value of all goods is the degree of well-being which is dependent

* See above page 29.

upon goods in general. If, however, we desire a more concrete standard, one that will give us a more definite idea, just how goods are connected with well-being, then we must take not one but two standards, which though co-ordinate in theory are yet of very unequal practical importance, because of the greater prevalence of the phenomena in which one of them is operative; one is the utility of the good, and the other is the personal sacrifice or disutility involved in the acquisition of the good. The domain of the latter is much more limited than we usually think. In the great majority of cases, even in those in which the so-called law of cost undoubtedly plays a part, the final determination of the value of goods is dependent upon utility.

Vienna.

E. VON BÖHM-BAWERK.

[Translated by C. W. Macfarlane.]

RELATION OF LABOR ORGANIZATIONS TO THE
AMERICAN BOY AND TO TRADE
INSTRUCTION.

In the *Century Magazine* for May, 1893, occurred these words, inspired by the late Colonel Auchmuty, the head of a large New York trade school: "The American boy has no rights which organized labor is bound to respect. He is denied instruction as an apprentice, and, if he be taught his trade in a trade school, he is refused admission to nearly all trade-unions, and is boycotted if he attempts to work as a non-union man. The questions of his character and skill enter into the matter only to discriminate against him. All the trade-unions of the country are controlled by foreigners, who comprise a great majority of their members. While they refuse admission to the born American boy, they admit all foreign applicants with little or no regard to their training or skill."

These words express a widespread belief that our labor organizations strenuously object to trade instruction, and that the reason for it is that these organizations are controlled and mostly composed of foreign born, who are hostile to the American boy. Before determining the amount of truth in the first charge, with which this paper is especially concerned, it is worth while to devote a few words to the second charge as to the composition of our trade-unions and their attitude toward the American born and those of American parentage.

The two historians of our early labor movement, Mr. George E. McNeil, of Boston, and Professor R. T. Ely, hold that the founders of most of our earliest labor organizations before 1860 were of native stock. Since then, our immigrants have entered the hard-handed industries more largely than have the native Americans. Still more largely

have they entered the labor organizations of their trades in many, but not all, occupations. In Illinois, in 1886, according to the report that year of the Illinois Bureau of Labor Statistics, only thirty-two per cent of the 89,221 then in labor organizations were of American birth, while seventeen per cent were of Irish, twenty-seven per cent of German, nine per cent of British, and nine per cent of Scandinavian birth, while the percentages in 1880 of the various nationalities among the 333,942 in Illinois engaged in the manufacturing, mechanical and mining industries, trade and transportation, were: Americans, sixty per cent; Irish, seven per cent; Germans, sixteen per cent; British, six per cent, and Scandinavians, four per cent. The proportion of Americans had doubtless somewhat decreased by 1886. If all employers and their clerks could be excluded, the proportion of wage-earners of American birth in 1886, would doubtless still have somewhat, but not very much, exceeded the proportion of foreigners in the unions. Four-fifths of all those in the railroad organizations and one-half of those in the unions of cigar makers, iron moulders, gas and steam fitters, printers and pressmen were of American birth.

Most of our trade-unions have so little prejudice against any nationality, native or foreign, that they keep no records of the number of each in their membership. A number of unions, however, have given me estimates. Mr. Fruaseth, secretary of the Sailors' Union of the Pacific, writes that the percentage of foreign born in his union is ninety-five, and on the Atlantic coast less, perhaps fifty, while among the seamen in foreign-going vessels, who are entirely unorganized, the percentage is fully ninety-five. Of the lake seamen outside and in the union, fully seventy-five per cent are foreign born.

In the Bakers' Union, the foreign born predominate, and in the Confectioners' Union, the native. Ninety per cent of the Spring Knife Makers' Protective Union are native American. About two-thirds of the International Furniture

Workers and of the International Trade Association of Hat Finishers; thirty-five per cent of the Amalgamated Association of Iron and Steel Workers, and forty per cent of the carriage and wagon workers are of foreign birth.

President G. P. Monroe, of the Stationary Engineers, says, only fifteen per cent of his union are foreign born, which, he thinks, "smaller than in the trade outside." About one-half of the brass workers in the union and in the trade outside are reported as foreign born. About eighty per cent of the silk ribbon weavers in the trade and apparently in the union are of foreign birth. About one-sixth in the Barbers' Union are of foreign birth, and a larger proportion of these outside. Of the Boiler Makers' and Iron Ship Builders' Union, about one-half are reported as of foreign birth, but the president writes: "Nationality cuts no figure. The most intelligent are most in favor of organization."

Mr. F. P. Sargent writes of the Firemen's Brotherhood, what is equally true of the Brotherhood of Locomotive Engineers: "Our organization is almost entirely composed of American born persons."

President Martin Fox, of the Iron Moulders' Union, writes: "The question of ascertaining the percentage of native and foreign in the organization has never been entered into, as the union knows no politics, creed or nationality. The qualifications for membership are based on the ability and workmanship of the applicant to perform the work and command the wages paid average workmen, but, as a matter of fact, the native born predominate. Many of them, no doubt, are of parents born in foreign countries."

That such restriction of apprentices as exists in some unions is disconnected with any race prejudices, may be indicated by the case of the Tackmakers' Protective Union with only about 300 members in six locals, ninety-five per cent being of American birth. This union, dating from 1854, and one of its locals, perhaps the oldest of existing local unions, from 1820, voted in 1890 to take no apprentices

for the next five years, save sons of members, unless by vote of the union. The secretary naïvely writes that his union has never opposed the formation of trusts among employers in his trade, and the men earn \$125 to \$225 a month, and sometimes work only forty hours a week.

While the foreign born are in the majority in many of the hard-handed industries, this is not because of our labor organizations, but often in spite of their efforts, of late increasing, to prevent by restricting immigration this form of competition of those with a lower standard of living. Where the American born are not in our unions, it is either because the American boy does not like manual labor, and so is not engaged in the trades in which there are unions, or else he refuses to join the union of his trade. Many unions write that the Germans take most readily to labor organization, while in Chicago, the native farmers' boys from the Atlantic seaboard States are least responsive. An intense, self-sufficient individualism, which was more fitted to our earlier history, where organization of capital was also little developed, than to the present era of the corporation and the trust, keeps a large, but of late, decreasing percentage of the American boys actually in our trades from joining the unions of those trades.*

* In the Illinois Labor Bureau Report for 1886, pp. 228-29, appear some excellent observations on this subject, in part as follows: "There is both the distaste of the American youth for the trades, and their further indisposition to identify themselves permanently with any class or with any sphere in life. The foreign workman has the traditions of many generations and the walls of caste to restrain him within certain limits as to his occupation; he has no possibilities beyond a given sphere, and is trained and developed within it. Thus environed, his career and ambitions lie in the paths his fathers have trod, and his associations with his fellow-craftsmen make the trade-union his natural and necessary place. Transported to this country, he brings his feeling for the union and his class associations with him as a habit.

"But the American mechanic's boy is born to no condition in life from which he may not rise, or hope to rise, or which at least he may not abandon for better or worse. All the precepts of the schools and teachings of observation suggest other ways of making a living, or at least other avenues in life than those of his father. Add to this the time and toil required to learn a trade, and the frequent objections to his being admitted to the shops, the encroachments of machinery upon intelligent skill in all the industries, the lack of technical training in the public schools,

An extreme instance of a skilled trade monopolized by the foreign born is that of the better kinds of tailoring. One of the most expert workmen among the tailors of Chicago tells me that he has never known but one American at work among the better grades of tailoring. But this is due to the fact that a journeyman tailor cannot afford to take a helper unless that helper has first learned how to sew. But opportunity for so learning is not afforded in this country. In Germany, such preliminary training is afforded in numerous so-called back-shops connected with tailoring establishments, but which do not exist to any great extent in America. Here work is largely done by the journeyman in his room.

A few years ago a trade school was established by the merchant tailors in New York for teaching the tailoring trade. The first year the school had forty pupils. The boys were paid a proportion of the value of their product. Then the system was changed, and the boys were charged tuition. The bright boys dropped out and procured situations as cash boys, errand boys, etc., and were replaced by merchant tailors' sons and proteges or friends, who never intended to be journeymen, but desired to gain a smattering of practical work to qualify them to become cutters or masters. The school dwindled to ten pupils during its fourth and last year. Indifference on the part of merchant tailors and the preference of American boys for positions as civil engineers, physicians, electricians, and the like, rather than tailors, are said in letters to me by its managers to have been more responsible for failure than any hostility or indifference of the Journeymen Tailors' Union.

Mr. M. H. Madden, president of the Illinois State Federation of Labor thus writes me: "You ask, are foreign born workmen received into the unions with less inquiry as to the

and it is not difficult to understand why the American-bred youth seek clerkships and swell the ranks of non-producers, who live by their wits rather than by manual industry, nor why four-fifths of 49,604 mechanics and artisans in Illinois are of foreign antecedents and habits."

length of their training than is true of American born. The answer to this must be in the negative, and it must be delivered with emphasis. The modern trade-union in America is in its infancy as compared with the trade-unions of the old world. Seven years is the time required to serve as an apprentice in the old world. Five years is the limit in this country. Compensation is a feature here. Over there the apprentice receives nothing, and frequently pays for the privilege. As regards competency, the foreign born journeyman is thoroughly grounded in many particulars. I wish to direct your attention to this feature especially. I am a native of Illinois and for thirty years have been a close observer and student of these matters. Therefore I cannot be accused of prejudice in behalf of the foreigner. Instead of his being discriminated in favor of, he is rather legislated against by our societies principally in the way of appealing to prejudice."

If the trade-union is not opposed to the American born in general, is it opposed to the latter learning a trade? This is often charged because of rules in some unions that limit the number of apprentices to be employed at any one time in a union workshop. Have such rules really limited trade instruction? Rather have they tended in most cases, where enforced, to prevent a horde of half-trained boys, with less wants than the average married wage-earner from being used by the more unscrupulous employers to beat down wages. There is, however, immensely less actual restriction of those really desirous of an apprenticeship than is commonly supposed.

Even if our trade-unions did materially restrict competition by well-equipped men by depriving them of the opportunity of learning a trade, the example of many employers might be cited as a justification of such action. Trusts and combinations to restrict competition are the order of the day. In the convention, in 1892, of the National Association of Builders of the United States, John Byrns, of New

York City, declared:* "In the city of New York no consumer can go into a supply house and buy a pound of lead, and I think that that same system exists throughout the country. We deem this necessary for the protection of our interests. If a consumer could go to a supply man and obtain goods as low as we can and cheaper sometimes, when our bills should go to the consumer it would put us in the light of extortionists." C. W. Gindele, of Chicago,† declared: "The Stone Cutters' Association have a distinct understanding with the Quarrymen's Association that every foot of dimension stock that is sold in Cook County must be sold direct to the stone cutters."

In a recent article, Mr. George C. Sikes, has shown by a reference to the declarations of large employers themselves‡ that neither in Boston, Rochester, New York, nor Chicago in the building trades do the large builders, who are able to train apprentices, take as many such as the union rules allow or as they would like, while the inferior small employers would, if allowed, flood the market with cheap, half-trained youths. Prominent builders in the above cities state that the unions do not stand in the way of as many gaining thorough trade instruction as present facilities and self-interest among competent employers permit.

The semi-annual report of the British Trade-Union of Lithographic Printers, in September, 1889, thus clearly and sensibly expresses the laborers' view:§ "We believe in technical education, if the object sought to be attained is to improve the skill, efficiency and touch of workmen and apprentices, who may be permanently engaged in certain industries, that is, for those engaged in the printing trade to receive further instruction in printing in the technical school; those employed in lithographic printing to receive

*Proceedings of Convention, p. 70.

†*Ibid.*, p. 78.

‡*Journal of Political Economy*, June, 1894.

§Fourth Report on Trade-Unions of British Department of Labor Statistics, pp. 613-14.

lessons in lithography; and those engaged in other trades to receive practical instruction in respect to those trades. But to throw the classes open for individuals engaged in one industry to receive practical lessons from practical teachers engaged in another industry will be to defeat the object sought to be attained, and will be mainly prolific in introducing or manufacturing workmen far less skilled than those of to-day. It will appeal to the intelligence of any man that, unless this restriction be observed, dire results must follow.

"We would place no obstacle in the way of the development of technical education. We wish it every success. But we must ask our members, several of whom are teaching in technical schools in different parts of the country, that only those who are engaged in the trade, either as journeymen or apprentices, shall receive instruction in connection with it.

"The system of to-day by which apprentices are but taught a portion or certain branch of their trade is in itself bad enough, and produces a number of workmen not properly skilled, and these are the individuals who would be much benefited by receiving instruction at the schools. But to give instruction in lithography to any who may apply for it, and who are not members of the trade, would be to act diametrically opposite to the objects ostensibly sought to be attained."

The writer of this paper made a personal investigation of this matter in 1891, embodying the results in a paper which appeared in the proceedings of the American Social Science Association for that year. Of the sixty to seventy trade-unions in the United States then having a national or international organization, forty-eight with a membership of over five hundred thousand made returns to the writer. Most of the other unions are small and known to place no restrictions on apprentices. Now of these forty-eight unions, twenty-eight embracing 222,000 members, or forty-five per cent of the above 500,000

had no restrictions upon apprenticeship; in ten unions with 197,000 members, or thirty-nine per cent of all, restriction was left to the locals. Nearly all of these 197,000 were carpenters, printers, cigar makers, painters and decorators. No returns were received from most of the building trades aside from the carpenters, but it is known that where they have any restrictions upon apprenticeship, they are usually a matter of local regulation. Let us examine a little the restrictions in these unions. Only those branches of the cigar makers' organization which make the better grade of cigars attempt any restriction at all of apprentices. Where restriction is attempted, it is usual to allow one apprentice to a shop and two apprentices where from five to ten journeymen are employed. The term of apprenticeship being three years, and the natural working life of cigar makers over fifteen years, there is, in the application of this rule, opportunity for a considerable yearly increase in the number of cigar makers. It may be a sufficient evidence that the cigar makers do not unduly restrict the number of apprentices if I state that the Chicago union, with a membership of 1900, has between 700 and 800 apprentices.

Of the eleven local typographical unions in New York State investigated in 1886 by the New York Bureau of Labor Statistics, eight reported some restriction of apprentices. The very moderate rule common to most of these was one apprentice to four or five journeymen, the term of learning being four years. But such rules are of comparatively little avail in keeping down the number of apprentices because of the large number trained in the country newspaper offices, where, in the absence of unions, no rules are applied. All of the eleven unions, as stated in the report, admitted to their membership on equal terms with any others, those boys who had learned their trades in non-union establishments. The Chicago Typographical Union allows one apprentice (in newspaper and two in job offices) to the first ten journeymen and one apprentice to every five journeymen thereafter.

A veteran printer of the union has found this rule would allow for the 1700 membership of one of the Chicago unions about 250 apprentices, but the number employed is only about 140, very clearly proving that not as many boys desire to be apprentices in the printing trade by nearly one-half as the union rules would allow.

In view of the common belief that the building trades are successful in limiting the number of apprentices, it is very significant to note the fact brought out in the Massachusetts census for 1885, that in none of the building trades was there one-half, and in most cases not one-fourth, as many apprentices as the union rules would allow. Among the blacksmiths there was one apprentice only to twenty-eight journeymen; among the carpenters, one to sixty-two; among the machinists, one to twenty; among the masons, one to one hundred and five; among the painters, one to eighty-nine; among the plumbers, one to forty-four; among the printers, one to nineteen; among the tinsmiths, one to sixteen. In Wisconsin, in 1889, according to the fourth biennial report of the Commissioner of Labor and the industrial statistics of that State, there was only one apprentice to every thirteen among the masons; one to every twelve among the carpenters; one to every twelve and a half among the painters, while there were three apprentices to every four journeymen among the plumbers.

Two of the most exclusive unions in this country are the Tile Layers' and the Flint Glass Workers'. The former with a small membership requires a learner to serve two years as an apprentice, and then he must be able to secure a two years' contract as a laborer at three dollars a day for the first year and three dollars and a half for the second. He must then be able to earn four dollars a day and pay an initiation fee of from twenty-five to one hundred dollars according to the locality.

The Flint Glass Workers' allow only one apprentice to every twenty men unless there are less in a shop, and he must

serve four years. By adding an initiation fee of one hundred dollars in case of emigrants, and having other stringent shop rules, they keep up wages to from six to nine dollars a day for their members in this skilled trade during the ten months' work season. But these examples of a labor trust modeled after the increasing examples of the same among capitalists are the exception in the labor world.

Only seventeen of the forty-eight unions making returns as above stated, had any national rules restricting apprentices, and only fourteen of these unions, with 71,000 members, or fourteen per cent of the 500,000, in the forty-eight unions, reported any success in the enforcement of such rules. Of these 71,000, 9500 were glass-workers, 5417 were hat makers, 28,000 were iron moulders, and 20,000 were journeymen tailors; and these last allowed one apprentice to every journeyman, the apprenticeship lasting four to five years, a very liberal rule. In the census of 1885 in Massachusetts, it appeared that in the hat business there were 226 technically known as hatters and twenty-nine apprentices, but there were 875 other hat makers such as silk and fur hat makers, finishers, trimmers, pressers, etc., and only three apprentices, instead of fully three times that number, as the union rules allowed. Similarly, there were in Massachusetts only sixteen apprentices to 769 journeymen pattern makers, or one to forty-eight; fifty-eight apprentices to 2997 iron moulders, or one to fifty-two, and one apprentice to twenty-six wood carvers, and one apprentice to every twelve journeymen tailors. In this, as in nearly every case, we find that the death-blow to apprenticeship is not struck by the unions, but by the conditions of business which bring workers into a trade without any regular training or apprenticeship whatever.

As a final proof that the trade-unions are losing interest to a great degree in the restriction of apprentices, reference may be made to the small number of strikes for this purpose. In 1881-86, inclusive, according to the United States

Bureau for Labor Statistics there were 22,304 strikes and of these only 250, or one and one-tenth per cent, had any connection with apprentices. Sixty-three of these were unsuccessful. Of these 250 strikes, 157 were in the building trades, twenty in glass, fifteen in tobacco, twelve in clothing, nine in metals, seven in printing and publishing. Of the 9384 establishments on strike in New York, during 1885-89, as reported by the New York Bureau of Labor Statistics for 1889, only 114, or one and two-tenths per cent were connected with apprenticeship, and of these 114 only seventeen per cent were either wholly or partly successful, though of all strikes, sixty-two per cent were wholly or partly successful. In 1891 and 1892 less than one per cent of the strikes or of the men involved were connected with disputes over apprenticeship rules.

Although the writer of the *Century* articles charges the trade-unions with the downfall of the apprenticeship system, the only system known until very recently for imparting trade instruction, he says in the June number, 1893: "At the Sixth Annual Convention of the Pennsylvania Association of Master House Painters and Decorators, held at Scranton in January last, one of the delegates read a paper on the apprenticeship system as observed in his trade. He said that after a personal investigation among at least 600 master painters and decorators of Philadelphia and vicinity, he had discovered that not an average of one in fifteen had a single apprentice in his business, and that the larger the workshop or establishment, the greater seemed the abhorrence with reference to the employment of boys to learn the trade, many of the masters going so far as to say that in all their experience as masters, extending over fifteen to thirty-five years and employing from fifteen to fifty and as high as eighty workmen, they had never bothered their brains teaching a boy the business."

I will further state that in the course of University Extension lectures before many thousands of persons, I have

urged everyone who knew of a single boy who had been prevented from learning his trade by trade restrictions, to kindly report the matter, orally or in writing, to me, and I have never thus or in any other way received personal knowledge of more than two cases, one of which was among the nail workers, and the other among glass workers although I believe there are a few hundred such among our 65,000,000 population. The downfall of the apprenticeship system is due largely to the introduction of machinery and the consequent subdivision of work in large shops. This renders it impracticable for the employer to take a personal interest in each of his men, or to give them an all-round training. It is more profitable to set the learner at work upon a single machine or branch of work where he will soon acquire speed. The boy prefers this because he is eager to begin earning as soon as possible. But the apprenticeship system as managed under modern conditions is at best a poor method of trade instruction. It is a picking-up process. Scores of wage-earners have assured me that very little actual teaching is done for the boy in the apprenticeship, but he must do a great deal of drudgery, run more or less danger of moral contamination, and can only learn what he may incidentally pick up by watching others. This is a great waste of time. There is no awakening of keen ambition and love of the work; no adequate training or imparting of dignity to the work. A journeyman is hardly ever paid, as he should be, when on piece work for the time lost in teaching an apprentice. This alone accounts for much of whatever opposition there may be among journeymen to a large number of apprentices.

In a forcible address before the Charities Congress of the World's Fair Auxiliary, Professor Felix Adler, of New York, held very truly that our institutions are based first, on democracy, and second, on universality of culture, and that this latter must come, not only in the pleasure and culture of school days and out of working hours, but that man

must get his greatest good in his work. But he cannot do so unless he is better trained to see and produce the beautiful and the skillful than is the ordinary apprentice. President Smart, of Purdue University, Indiana, who has been very successful in combining practical trade instruction with high school and more advanced work, presented at the annual convention of the Bureau of Labor Statistics in 1888, the result of extensive inquiries as to the number of boys that had become successful workmen out of every hundred who had entered each trade mentioned. Of the carpenters, there were only eighteen; of the pattern makers, sixteen; of the blacksmiths, ten; of the moulders, seventeen; of the machinists, fourteen; or an average of fifteen to each one hundred. Evidently something must be done. What shall it be?

First should come far more of mental training through compulsory education from five to fifteen years of age, and ultimately five to sixteen. Next a thorough system of manual training properly taught by expert teachers should be a part of every school system from the kindergarten to the college. Such training develops, as experience in Toledo, Boston and scores of other cities is proving, manual skill and the development of the whole body and character. Its object has been well defined to be to add to the pupils' power of expression by verbal description the power of expression by delineation and construction. It tends to awaken a pleasure in honest work in the hard-handed as contrasted with the soft-handed occupations. It renders it possible for a boy to learn a trade more quickly after leaving school, and thus induces the parents to keep the child in school longer and thereby better equip him in other ways for life. It is beginning to be recognized that the worst enemies of workingmen are those who would confine public education, as some recent Chicago agitators would do, to "the three R's" that might fit the boy, as one of them urged to be "a clerk in O'Leary's grocery." If it be urged that the workingmen cannot afford to keep their children in

school more than three years, or that the public schools are not sufficiently equipped for better training, a sufficient reply is that the workingmen who have the votes, should demand such reform in taxation as will secure public revenue in proportion to ability to pay from the rich citizen as well as from the small house owner, and thereby properly equip our school and provide, where private charity may fail, such temporary aid to children at school as will guarantee to them a nearer approach than now to equality of opportunity with other social classes in the development of their manhood. Before a boy enters upon the duties of a trade or occupation, he should have such breadth of culture as will enable him to choose wisely and to be an intelligent citizen. One can never succeed thoroughly in any special occupation who has not a broad foundation, as the president of Heidelberg University recently said relative to professional training: "A specialist who is only a specialist is not a specialist at all."

Workingmen need great capacity for turning from one tool or machine to another in the same or a kindred occupation. W. T. Harris, Commissioner of Education in the United States, well put it when he said that, whereas formerly a man was obliged to spend seven years in learning a trade, he must now be able to learn a new one in seven weeks. Such are the vicissitudes of modern invention and industrial development. For all this, manual training is an excellent preparation. As Mr. Powderly said at the time of President Smart's address just quoted: "Every school-room should be a workshop, a laboratory, and an art gallery. At present, a trade learned is a trade lost, for the learner does not have an opportunity to practice more than one part of his calling, and if thrown out of that one groove cannot fall into another. Under an industrial system of training, every American youth will know sufficient of all trades to step into whatever opens itself to him, and he will not be forced by circumstances to stand in the way of

another who is anxious to rise, but will be fitted to take a step forward at a moment's notice. He will always find work to do and will do it more rapidly, with better tools, and with greater reward than the artisan of the present." Both Mr. Samuel Gompers of the American Federation of Labor and Mr. George E. McNeill, of Boston, confirm my opinion that if any opposition by organized labor to public manual training schools ever existed, it has in most places yielded to hearty endorsement.

But something more is needed than manual training. This furnishes the foundation; but there should follow in some trades special trade instruction. The well-known authority upon education, Professor James Mac Alister, writes me: "I am strongly of the opinion that trade schools are needed to maintain the skilled crafts at a high standard of excellence, and that without them, labor, demanding intelligence and training, will deteriorate. Without them our productive industries and the men engaged in them cannot hold their own against the skilled labor of the most advanced European countries. We have not yet begun to realize the importance of technical education in the broadest sense of that term. The trade school is needed to bring the finer industries to perfection. It is clearly understood in Germany and France, and England is rapidly learning the lesson. Workmen in this country must learn to accept the schools in which their crafts are taught as the only means of raising the standard of their work and improving their economic and social condition. The same thing must be done for the skilled occupations of women. The courses in dressmaking and millinery in the Drexel Institute have this end in view."

It is well known that the superiority of France in works of taste and the rapid strides of Germany in dispossessing England of some of her foreign markets are partly attributable to the fine technical and trade schools which France and Germany have supported, partly through public, partly through private means. So far as can be learned, the

trade-unions in these countries have co-operated with the movement. In Paris, as I am informed by the distinguished economist, Professor Levasseur, there are twenty trade-unions that are affiliated with evening trade schools for the better instruction of those who work as apprentices during the day. The reputation of Paris in millinery and dress-making is surely somewhat sustained by the eight fine schools for training girls in cutting, fitting and artistic designing. Belgium has also developed an excellent system of trade schools. For example, at Brussels there are trade schools in the building trades, tailoring, printing, watchmaking, etc.; at Liege, in iron mining, electrical work, etc.; at Ostend, in ship building and the fisheries; at Ghent and Verviers, in cotton weaving and dyeing. Most of these schools have night and even Sunday forenoon sessions for those that can best come then and week-day sessions for others. A large portion of the pupils are regular apprentices, and, what is most vital, they are thoroughly taught. There is no pretence, as in some American schools, to teach all of a trade in three evenings a week for six months. The evening school course for journeymen weavers at Enschede, Holland, is six school months each year for six years. In the United States Consular Report for October, 1893,* are interesting accounts of trade instruction in Europe. Our Consul at Rotterdam, Mr. William E. Gardner, thus writes: "Next to educators themselves, employers of skilled labor are the most pronounced advocates of trade schools, which do not cheapen, as these men testify, but only improve the grade of skilled labor, making it not merely profitable to the employer, but more marketable. The old adage that 'there is room at the top' is proved anew in the experience of the country thus far with its trade-school graduates. Strangely enough, as it will appear to Americans, there is not, on the part of journeymen mechanics, any serious protest against an increase of skilled

* Pp. 187-287.

workers, for two reasons: (1) There is not in the Netherlands, as in England and the United States, the compact labor organization to crystallize and make public any latent objection that may exist; and (2) the older shop-trained mechanic, from whom opposition would be naturally expected, is probably also the father of a boy or girl who is having the benefit of virtually free training in the local trade school. Thus is the disadvantage of the school in its relation to him as a mechanic quite offset by its advantage in its relation to him as a father; and, on the whole, he has no fault to find." In view of the favor shown to these trade schools by such labor organizations as do exist in Paris and elsewhere, it may be safely said that the second of the above two reasons is far more important than the first.

The recent report of the United States Labor Commissioner on Industrial Education is an invaluable presentation of the great work of European trade schools. Nowhere in all the report is there a hint of trade-union opposition. In Brussels the Typographical Union took the initiative in establishing a trade school. After five years' attendance, pupils successful in the examination receive a diploma entitling them to the wages of a skilled workman. The governing committee of the school is equally composed of workmen and employers.* A similar school was started in 1886 by the Printers' Union at Paris. All of the graduates, says the report,† have entered into positions found for them by this union. The report declares that the considerable effort of the past twenty-five years to raise the standard of trade education in France "has come from the side of labor organizations, industrial employers" and private and benevolent institutions.‡ The report also declares, in speaking of the Belgian trade schools:§ "The value of these institutions

* Eighth Annual Report of the Commissioner of Labor of the United States, p. 192.

† Page 277.

‡ Page 277.

§ Page 199.

to the laboring classes can hardly be overestimated. They meet the needs of various kinds of wage-earners. Workingmen's children, who become bread-winners as soon as the factory laws allow, and even before, find in night study at the industrial schools the instruction which otherwise they would never have leisure to secure. Older men, moreover, discovering at the shop what they lack in efficiency, what hindrances bar their advancement, what influences must be counteracted, start in, even late in life, to supply the want by systematic training, which may be had absolutely without cost. Laborers fifty years old are not ashamed to seize such tardy opportunities, and numbers of workmen assert that they were fathers of large families before the chance occurred to enter on this coveted instruction."

The nearest approach I have discovered in this country to the European method of trade instruction is in connection with instruction in plumbing at the Pratt Institute, Brooklyn. "The Journeymen Plumbers' Association of Brooklyn," says the catalogue of 1893-94, "co-operates in the direction of these classes. At the end of a two years' course, a committee of the association examines the members in regard to both manual skill and knowledge of trade methods and awards certificates to those showing satisfactory proficiency, which certificates, in case of the holder afterward applying for admission to the association, are accepted in place of the examination of like character otherwise required. In the January number of the *Pratt Institute Monthly* appears this statement: "The evening trade classes of the department represent very forcibly the change of attitude which practical workmen are showing toward trade schools. Over eighty per cent of the total number in these classes are engaged during the day at practical work in the trades. Many of these are sons of mechanics of reputation and experience, while in many cases the student's presence is due to the older associates in the trade. The use of the evening trade classes in this manner has been encouraged by the Institute,

which holds that the natural work for these classes is to broaden and perfect the training of those already started in the trades, while the day classes afford the true opportunity for training beginners."

In this connection the following letter from the head of trade instruction at the Pratt Institute, Brooklyn, will interest: "The attitude of the trade organizations toward the trade work of the Institute has been in general one of armed neutrality. With the exception of those trades involving the most ignorant labor, viz., plastering and bricklaying, we have never met with active opposition from trade organizations. In the cases above mentioned, the unions, on two occasions, threatened to take away our instructors, who were journeymen, but in each instance, the matter was amicably adjusted. Any opposition to the work of the school is, of course, felt in resistance to the employment of its graduates and this has varied greatly in the various trades. In plastering and bricklaying, this opposition has always been quite strong and compelled the graduate to commence work in some small place out of town and after a while to return to Brooklyn and join the union, which, under these circumstances, was easily done.

"In the plumbing class, most of our students have been apprentices before coming to the school, and with those who are not, it has been the practice to afterward obtain an opening as an apprentice and then, after a short time, take the examination which the rules of the Journeymen's Association provide for and gain their standing as journeymen. The journeymen would, as a rule, I think, like to shut out these latter school-trained men, but they know that they are powerless to do so and largely in consequence of this they have come into a working co-operation with the Institute in the direction of the plumbing classes—the first time, as far as I am aware, that a journeymen's organization has come into co-operation with trade-school movement.

"The members of the carpentry classes have had little difficulty. They have not brought forward their school training among the workmen, but they have, almost without exception, very quickly secured good openings at very favorable wages. I think there is very little prejudice among the carpentry trade against the trade schools. In machinery it is much the same. The students are obliged to start at smaller wages but their progress is rapid. They are liable to meet at first with prejudice from the workmen, but in no case have I known of active opposition. With printers I have not so much data because we deal almost entirely with apprentices and even with journeymen."

Relative to the mechanical trade schools of the master builders of Philadelphia,* one of the managers wrote, me in the summer of 1893, as follows: "At the opening of the schools, three years since, the attitude of some of the principal trade associations was entirely hostile. They claimed that the Exchange established the schools to render their members independent of any agitation in regard to wages, by training for trades only such as they chose, and that the policy of refusing to admit the sons of journeymen would be adopted. Claiming also that it was intended to teach trades in less than the usual time, they stated emphatically that the shop was the only school, that no trade could be learned in less than four years, and that employers were themselves responsible for keeping American boys out of trades. None of these statements had any foundation in fact, but their influence was such that, outside the membership of the Exchange, it was almost impossible for our graduates to obtain entrance into trades, and the attendance on some trades during the second term was reduced more than one-half.

"The Exchange would be glad to work in harmony with the various associations for the general improvement of both apprentices and journeymen. But where rules exist to

* For a good account of this school and of apprenticeship generally in the building trades, see *Journal of Political Economy*, June, 1894, article by Geo. C. Sikes.

interfere with proposed work it cannot take the initiative in proposing to modify them. This has, however, been done voluntarily by one of the principal associations, the bricklayers, and after a conference the points conceded were that preference would be given to graduates from the schools, and in consequence of their holding certificates their term of apprenticeship would be shortened one year. Other trades have not shown the same foresight and still retain rules which might be modified if the objects sought were fully explained, as they might be in a conference of committees.

"There can be no doubt of either the value or the practicability of trade instruction, avoiding, however, the attempt to teach too much in a short time. Up to the present time the schools are limited to the instruction of apprentices. For them, under the changed condition of apprenticeship, there is only the opportunity to learn from observation. Only in exceptional cases are journeymen willing to teach them, and there is consequently no regular system of instruction, the rules of the associations simply stating that apprentices shall be afforded every opportunity of acquiring their trades. That this is unsatisfactory is shown by the number of young men, already apprentices, who fill whatever vacancies remain in the classes, and applications received from journeymen of several years' experience who recognize the fact that 'picking up' a trade leaves them the inferiors of younger men who have acquired both method and manual skill." Others of the managers more emphatically testify their conviction of the growing friendliness to the school of the Philadelphia trade-unions.

Mr. P. J. McGuire, general secretary of the United Brotherhood of Carpenters and Joiners of America, and a resident of Philadelphia, thus writes relative to the Philadelphia and New York schools: "While there has been no official hostility on the part of labor organizations toward the Mechanical Trade School of the Philadelphia Builders' Exchange, still there is an undercurrent of ill-feeling against

it. The members of labor organizations had the impression that the management of such a trade school under the auspices of the Builders' Exchange was undertaken purely out of hostility to the trade-unions and with a view to their injury. Quite an influential element of these organizations, nevertheless, is of the opinion that mechanical trade schools are merely primary and elementary and largely theoretical; hence, they cannot materially injure labor organizations nor bring the graduates of these schools into very active competition with mechanics trained under a practical apprenticeship system.

After the pupil leaves the trade school and goes out on a building, he has to practically apply the knowledge he has acquired in the trade school and sometimes has to unlearn much of that which he has been taught. Had these mechanical trade schools been undertaken by the State or municipality, there would not be such manifest opposition to them on the part of organized labor. The late Colonel Auchmuty's efforts were combatted by the trade unions, because he went to the employers and contractors for co-operation and encouragement and solicited their endorsement on the special plea that graduates from these trade schools could work cheaper and be free from the control of the trade-unions. He went out of his way to charge that the trade-unions were managed and run by foreigners and that American boys were excluded from learning trades by the efforts of foreign trade-unionists. These ill-advised remarks on his part created a sturdy prejudice among organized workmen against Colonel Auchmuty.

"The allegations in a recent issue of the *Century* are untrue generally. There is no restriction in our organization nor in the bulk of trade-unions to keep the American boy graduates from the trade school from joining a trade-union or working beside a trade-union man. There are very few trades now which have apprentice 'rules to exclude the American boy from learning a trade as an apprentice in

favor of badly trained foreigners who are daily admitted to the unions.' "

Apropos of Mr. McGuire's suggestion of public technical schools to supplement manual training schools, it may be stated that in Europe many of the trade schools were started by private aid, but by far the larger part are now managed or supervised by the State, while the entering wedge to a similar development in this country has already been driven in the support by taxation of our State agricultural colleges, which teach not only the trade of farming but also in many cases, engineering and some of the mechanic arts. In Chicago and very likely in a few other cities many apprentices among stone cutters and other trades requiring drawing take lessons in a Turner hall from nine to twelve Sunday mornings, but the expense and distance from home if not religious scruples keep away many. There is great need of public technical instruction.

Mr. M. H. Madden, president of the Illinois State Federation of Labor, previously quoted, expresses the opinion of many American trade-unionists when he writes: "You ask, do the Illinois trade-unions refuse to admit to membership any graduates of a good trade school, like Purdue, or would the unions refuse to admit, if such a person should apply for membership. The answer to this would depend somewhat upon circumstances and somewhat upon the trade involved. In many trades the question would be one of competency only, which would be ascertained by examination or example of work. In other trades, such as engineering, the trade insists on recruits coming along the line of gradual promotion. This makes the journeyman out of the stoker apprentice. Hence, trade schools or manual training institutions might not be recognized as furnishing the field for this sort of a plant."

Very significant in relation to the attitude of our unions toward both to trade instruction and immigrant labor were the resolutions passed in the November, 1893, convention of

the Illinois Federation of Labor, on motion of a delegate from the Painters' District Council of Chicago:

"WHEREAS, owing to the defective apprenticeship system of this country the standard of skill of the American mechanic is not what it should be in trades where active ability is required, and

"Whereas, in all industries throughout this great land aliens perform the most skillful part of the work, and

"Whereas, drawing and designing are the fundamental principles of all trades of handicraft, be it

"Resolved, that this convention advocate the perfecting of an apprentice law that will protect the apprentice and tend to raise the standard of skill of the American workmen up to that degree now enjoyed by our brothers across the sea; and to this end be it

"Resolved, that we demand of the public schools throughout the State the establishment of classes in night schools, whereby those who work during the day at their various trades can obtain instruction in the art of free-hand, ornamental and mechanical drawing."

The fears of many trade-unionists with regard to trade schools are forcibly stated in a letter from Mr. Samuel Gompers, president of the American Federation of Labor. He holds that the Baron de Hirsch Trade School, as well as the other trade schools in New York City, are only working great injury to the American wage-worker. Mr. Gompers writes: "It is not only ridiculous but positively wrong for trade schools to continue in their turning out 'botch' workmen who are ready and willing, at the end of their so-called 'graduation,' to take the places of American workmen far below the wages prevailing in the trade. With practically half of the toiling masses of our country unemployed, the continuance of the practice is tantamount to a crime."

The nub of the difficulty is evidently that which was presented in the report for 1886 of the New York Bureau of Labor Statistics, by the secretary of one of the trade-unions: "I believe in all journeymen and apprentices being connected with the unions. If a boy become a full-fledged mechanic in a technical school, he would not know anything about unions, nor would he have any sympathy with their rules and regulations."

Cannot this difficulty be obviated in public-supported trade schools, or in schools affiliated with trade-unions possibly in some such way as in Paris, Belgium, or in the Pratt Institute schools hitherto mentioned, where the pupil in the trade school afterward becomes an apprentice for a short time, or is an apprentice even during his trade life? In fact, may not the present few American trade schools be animated by a more friendly spirit toward organized labor and be deserving of more kindly consideration in return than is assumed by some trade-unions?

Says the New York *Herald* of May 28, relative to the Hebrew Trade School just mentioned, in an article endorsed by the managers of the School:

"In this city there exists a trade school whose policy is directly in accord with organized labor, and that is the Baron de Hirsch Trade School, at No. 225 East Ninth street. This school has been in operation for nearly a year and is one of the works founded by means of the fund contributed by Baron de Hirsch for the amelioration of the condition of Russian Jewish immigrants.

"The management of this school deserves the hearty support of every trade-unionist in the city. It does a good and necessary work for the Russian immigrants without interfering in any way with established standard of wages or hours, simply by adopting the aims and methods of organized labor. Every pupil is strongly urged to join the union of his trade immediately upon graduating, and not content with this passive indorsement of trade-unions, the managers have instituted a Saturday evening course of lectures upon social, political and industrial questions, which includes lectures upon the objects and methods of labor organizations."

The manager of these Baron de Hirsch trade schools thus writes me:

"My impression is, that the labor leaders who reflect upon the trade school problem are much more friendly now than

they were formerly; they are beginning to see that trade schools are a fixture in this country and that it is the part of wisdom for them to take trade schools graduates into their organizations as friends, instead of leaving them on the outskirts as enemies. Their hostility should be directed not to trade schools, but, if anywhere, to unrestricted immigration. The few men graduated by the trade schools are as 'a mere drop of water in a bucket' as compared to the thousands of mechanics from Europe, who pour into this country annually; how wrong, therefore, for American mechanics to shut off from their own children the advantages of a trade school in the face of this unrestricted immigration.

"There is no doubt in my mind about the practicability of trade school instruction; I can point out a graduate of these schools from the Carpentry Department who knew nothing about carpentry when he came here, about eight months ago; to-day he is earning about twelve dollars per week in an establishment where first-class joinery work only is done. So there are numerous examples in our different departments. We are mere beginners. We do not pretend to 'turn out' finished mechanics in six months or a year, any more than a law college 'turns out' lawyers in two years, or a medical college 'turns out' doctors in the same time; it takes years of hard work and study to make a mechanic, or a lawyer, or doctor—after they leave their schools of instruction.

"The talk of our one hundred annual graduates undermining American workmen by working for wages below that generally prevailing in trade is a mistake, a radical error, founded on ignorance; these few men are being absorbed in this country far more easily than moisture by the driest sponge. I find our graduates insist on getting good wages; and they generally succeed in getting them in time, provided they have been taught a trade which is adapted to their physical and mental attainments; some men are adapted for one thing and some for another; thus, it is an error to

have a small boy taught carpentry, for, a carpenter should be a strong man, capable of handling a heavy plank.

"Again, it is still a question in my mind as to what trades are best adapted for trade-school instruction; I am satisfied that carpentry, wood-turning, cabinet work, carving, plumbing, house and sign painting are so adapted; doubtless, also brickwork, masonry, stone cutting and blacksmithing are likewise so, though our schools have not yet adopted the same for lack of room. I am thoroughly convinced that labor organizations have nothing to fear from trade schools and their products; of a hundred men who enter our trade schools, we do not graduate ten; the remainder become tired of the work which we make them do; the result is that the other ninety per cent who leave us enter some common labor pursuit where they are apt to cut down wages of labor, whereas, had they remained in our schools, we would have made independent mechanics of them, who would be amongst the first to uphold the scale of wages."

The Auchmuty School in New York has in twelve years sent out over 4000 more or less trained mechanics, and just before the recent death of its founder received \$500,000 endowment from Pierrepont Morgan. The prospectus declares three months to be sufficient in the day classes to graduate young men who in the school become "possessed of the skill," though not, it is elsewhere admitted, of the speed "of the average journeyman and have a wider knowledge of the trade in all its branches." Colonel Auchmuty wrote in the *Century* of January, 1889: "Living is made dearer, the poor are made poorer by union rules. In nearly all callings where skilled labor is required, it can safely be asserted that a journeyman receiving four dollars a day and working with a trade-school graduate at two dollars a day could produce as much as two journeymen now do for eight dollars—a saving in cost of two dollars, or twenty-five per cent."

No wonder that any such effort to benefit the employer or the consumer at the expense of wages was opposed by the

trade-unionist. It is sound economic policy for the worker to prefer high wages to sharing as part consumer of his products in the cheapness that might result from lower wages.

But, as hitherto suggested, organized labor might possibly arrange with the Auchmuty, as has already been done to some degree with other schools, as just shown in Boston, Brooklyn and Philadelphia, to examine the graduates of the school and to apprentice them, with such shortening of the time of apprenticeship as the work done in the school would justify. In this way, too, the trade-school graduate would be brought into a knowledge of labor organizations, with the same prospect of becoming a member on completing his apprenticeship as is true of the ordinary apprentice. From the letter of the secretary of the National Trades Building Association quoted below, it would appear that already in some trades an amicable agreement between the Auchmuty School and some trade-unions has been secured.

The trade-unionist who believes in apprenticeship but fears the trade school should notice that the former is also a kind of school wherein the journeyman more or less imperfectly teaches the trade to his helper, and that the trade school, put on the basis urged in this paper, can here, as already abroad, help rather than hurt the apprenticeship system and make it again a strong factor in human progress. Many employers of labor and those interested in endowing or managing private trade schools, to say nothing of those to be founded, I trust, by the State and by organized labor, might here as in Europe, be glad to co-operate in this use of the trade school to more thoroughly train the regular apprentice, whether of American or foreign birth. Mr. Gompers, whose severe words upon New York trade schools were just quoted, has, since hearing of the nature of the European trade schools, expressed to the writer his hearty indorsement of the idea, stating that he and his fellow American trade-unionists hold that no skill or knowledge is too great to be desired by the members of our organizations.

The Plumbers' Union of Boston refused to let one of their members teach in a plumbing school. But the Mason Builders' Association and the Bricklayers' Unions of Boston and vicinity have taken a great step forward in solving this matter of trade instruction by placing the supervision of apprenticeship in the hands of a joint committee of the above organizations of employers and employed. The apprentice when taken must be between sixteen and twenty-one years of age and be able to read and write the English language. He must serve three years and until twenty-one. The employer must give "legitimate instruction" during the entire time. The joint committee relieves the employer of an unfaithful apprentice and takes away a good apprentice from an unfaithful employer, and adjusts all differences and sees to it that the apprentice receives his pay and that he has properly completed his apprenticeship. Without a certificate in this last point from the joint committee, the worker cannot join the Bricklayers' Union, membership in which seems to be necessary for employes of the Builders' Association.

The admirable agreement closes with the following provision, though no such trades school as is there mentioned appears to be as yet in operation in Boston: "Recognizing the fact that special instruction in the fundamental features of the bricklaying trade (which instruction shall comprehend education of both mind and hand, so that the individual shall gain a proper knowledge and strength of materials, and of the science of construction) is of as much importance as special instruction in other trades or professions, and, realizing that the chances of an apprentice to get as much instruction as he is entitled to, while at work on buildings, are necessarily limited, the parties to these rules agree that they will join in an effort to establish an institution in this city where all the trades shall be systematically taught; that when such school is established they will unite in the oversight and care of the same and will modify these rules so that

a reasonable deduction shall be made from the term of an apprentice by virtue of the advantage gained through instruction in said school."

The secretary of the National Association of Builders, thus writes me from his office, 166 Devonshire street, Boston: "Some difficulty was experienced in securing the co-operation promised by the union, which was caused by the fear of the workmen that employers would avail themselves of the services of apprentices at a less rate of wages than is paid to journeymen, which action would have operated to the detriment of the latter. All opposition to trade instruction ceased, however, upon the adoption of the enclosed agreement [just quoted]. The experience of the Master Builders' Exchange of Philadelphia has proved that when the purpose of trade instruction as advocated by this association has been understood, opposition on the part of the unions has changed to co-operation. The Bricklayers' Union, the most powerful organization of workmen in that city, is actively assisting the effort of the Master Builders in the trade school work; and other unions have followed their example. The earnest efforts of the late Colonel R. T. Auchmuty, of the New York trade schools, had practically overcome the opposition by the unions of New York City to trade training [not quite true, we have seen, so far as concerns the Auchmuty School], and at present, a number of the classes have committees of inspection appointed from the unions of the respective trades. There is a small school in existence in Rochester, under the supervision of the Builders' Exchange, which is favored by the workmen, and many similar institutions are projected by the filial bodies of this association."

If trade schools were general, covering most of the common trades, their influence upon wages would be beneficial, for increased skill would mean increased capacity to earn high wages, which after being earned, labor organizations might be trusted to secure for their members.

Again, with the increased artistic training of the workmen would come an increased demand for the production of products to satisfy those wants and there would also come the demand for wages with which to buy them. This would mean a higher standard of comfort and of wages. The experience of the best institutions that have tried to teach trades in Europe, shows that a trade may be learned somewhat quicker as well as far better at a trade school, followed or accompanied by a year of practical work. This would leave the apprentice or learner free to remain longer by at least two years in the public schools. Anything that will allow of our youth remaining in schools where the manual and mental are properly co-ordinated, until the child is sixteen or seventeen, ought to be welcomed by every wage-earner as a means of first giving such person that wider culture which is one of the greatest goals of modern democracy, and, second, of raising the ambition and intelligence which shall lead to a higher standard of living and to a wise use of such agencies as organization and State activity. When asked if trade schools would not increase competition with workmen who are now already in the field, President Smart, in the address already referred to, thus replied: "Is it possible that there is a man in this country who is afraid of the competition of his own child? If there is such a one, I think I can give him a good answer. My answer is this: The meanest form of competition which a good workman has to contend with is the competition which comes from a man who has spent little or no time in learning his business, and who therefore produces an inferior job of work at a lower price. This is the only form of competition which a good workman need fear. If a man does as good a job as you do, he will charge a fair price for it." I fully believe, with Professor MacAlister, that the trade schools have to come and that trade-unions can so shape the movement as to get benefit rather than harm from it, and that they need have no more fear that an increase in the number of workers will reduce the wages for skill than

have teachers and lawyers that an increase in their number will reduce their fees, or than the capitalist has that the increase in the amount of wealth, though it lower the rate of interest on the dollar, will lower the profit of the capitalist. With an increase of trade skill, a unit of skill may conceivably get less pay than now, though that is by no means certain, in view of the greater demand for products which the more highly trained classes of wage-earners will have. The increased demand for products would of course mean an increased demand for labor to produce them. But even if we admit that trade schools would slightly lessen the reward of the unit of skill, as the increase of wealth lessens the rate of interest, yet there will be so much greater amount of skill in society as a whole that the wage-worker, like the capitalist, will find his earnings greater than when skill was less extensive and diffused. In other words, his condition, even at the worst, is likely to be analogous to that of capitalist who formerly could earn ten per cent on his one thousand dollars and now earns say, six per cent, but has, say, three thousand dollars invested, so that his total earnings would now be eighteen hundred, where they were formerly only one thousand dollars. Organized labor should treat this question in a broad and liberal spirit, bearing in mind that in the long run trade exclusiveness and selfishness will not be as wise as a broad sympathy that should not only include those more fairly skilled, but the vastly greater mass of comparatively unskilled because untaught humanity all about us.

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MORTGAGE BANKING IN RUSSIA.

Russia and America are alike in as many respects as they are different. There is the same vastness of territory, the same severity and variety of climate, a similar conglomeration of people and races, the same undeveloped natural resources, and necessity of capital and skill to take advantage of them.

The paternal government of Russia and the enterprise of her German citizens have given her a number of large financial institutions, however, to make real estate loans, which it is my object to describe here, because it is the lack of such institutions in the United States, which is chiefly to blame for the enormous rates of interest revealed by the census mortgage statistics of 1890, recently published.*

As a rule, the rate of interest on mortgages, as well as the rate on public loans of any community, will indicate its economic condition, but the mortgage statistics published this year for Russia show that with a strained public credit, an inconvertible paper currency, an ignorant population,† an unenterprising upper class, and the entire absence of a middle class, Russia, as far as her mortgage statistics are concerned, still compares favorably with the United States.

As in the United States, so also in Russia, it is the richest and most prosperous localities that have the heaviest mortgage indebtedness, the property of the poorer districts being always subject to shorter loans at higher rates and for smaller amounts. On the map issued with the statistics from St. Petersburg, one-third is red of different shades,

*See my article on "Mortgage Banking in America."—*Journal of Political Economy*, March, 1894.

†Of the men less than ten per cent know how to read and write, and of the women less than one-half of one per cent, according to M. Anatole Leroy-Beaulieu.

showing forty per cent and over of the land to be under mortgage, another third blue of varying shades, and a third, in the northern portion, where less than five per cent of the land is under mortgage, is brown or white. The red belt runs south from the Baltic to the Black Sea and thence northeast nearly to the sources of the Volga.

The manner in which the statistics at hand have been obtained in itself indicates the different conditions. The statistics given simply comprise a statement of the loans made by thirty-six public, private and mutual banks, and this shows forty-one per cent of the total number of acres belonging to private individuals to be subject to a debt of fifty-one and one-half per cent of their value.

The following tables briefly show these figures for acres and lots:

FOR ACRES.

	Number of Properties Mortgaged.	Area of properties mortgaged. (Deciathines).*	Valuation of properties mortgaged.—1000 Roubles.	Amounts loaned originally and subsequently.—1000 Roubles.	Balance due January 1, 1893.—1000 Roubles.
Ten Joint Stock Banks	25,278	15,722,969	623,576	339,629	324,397
Mortgage Bank of Kherson . . .	3,740	3,187,929	193,475	96,737	80,117
National Mortgage Bank for the Nobility	11,597	9,605,405	573,578	326,873	319,473
National Mortgage Bank for the Peasantry	9,339	1,700,775	70,316	53,759	49,630
Special Section of the National Mortgage Bank for the Nobility	7,771	5,933,893	284,988	174,482	169,631
Mortgage Bank of Saratov-Simbirsk in liquidation	157	316,924	5,470	2,548	2,218
Mortgage Bank for the Nobility of Nijni-Novgorod	537	125,510	6,864	4,728	4,675
Credit Association for the cities of the Baltic Provinces	33,374	5,523,193	150,434	81,150	63,275
Credit Association of the Kingdom of Poland	9,238	3,713,647	283,743	128,509	113,783
Mortgage Bank for the Nobility of Kaukasus	1,282	492,041	12,195	5,734	3,899
Total	102,313	47,322,286	2,204,639	1,214,149	1,131,098

* One Deciatine equals 2.775 acres.

FOR LOTS.

	Number of Properties Mortgaged.	Value of properties mortgaged. —1000 Roubles.	Amounts for which properties are insured. —1000 Roubles.	Total amounts loaned originally and subsequently. —1000 Roubles.	Balance unpaid January 1, 1893. —1000 Roubles.
Ten Joint Stock Banks	14,329	225,150	202,997	119,988	100,894
Mortgage Bank of Saratov-Simbirsk in liquidation	109	1,533	1,219	799	308
Bank for the Nobility of Nijnii-Novgorod	758	7,505	8,010	4,326	4,186
Mortgage Bank for the Nobility of Tiflis and Koutais	2,290	28,258	20,555	16,027	9,951
Six Credit Associations of Russian cities	15,917	705,012	681,921	510,445	367,190
Five Credit Associations of Polish cities	4,093	155,790	97,131	57,467	45,749
Five Credit Associations of cities in Baltic Province	5,707	69,480	67,036	35,048	28,814
Credit Association of the City of Tiflis	856	16,783	15,862	8,499	7,682
Total	44,059	1,209,511	1,094,731	752,579	564,774

From these tables it appears that twenty-nine per cent of the loans on lands have been made by private banks, thirty-two and one-half per cent by government banks, and thirty-eight and one-half per cent by mutual associations, and Russia thus affords an illustration of the three principal different systems of mortgage banking that are carried on in Europe to-day.

To obtain the total mortgage indebtedness of Russia, should be added, however, to these figures of 1,695,871,933 roubles, also a sum for loans made by private individuals, and furthermore the debt of 872,000,000 roubles which is due from the village communities of liberated serfs to the Russian Government.*

The liberation of the serfs in 1860 marks an epoch in all things Russian. The change itself was of less immediate consequence to most of the serfs than to their masters. The former wanted to be free and to become the owners of all their land. The latter wanted them to be free but to have no land. What took place then was a division of the land giving

*According to figures furnished by Mr. Wischnegradsky in 1889 to Mr. W. T. Stead.

to eight million "souls,"* or about twenty million persons, about thirty per cent of all the land, the nobility retaining twenty-four per cent, the crown and the crown tenants owning the remainder.† Each "soul" obtained from three to four "deciatines," giving to every family of three male members from twenty-five to forty acres. The peasants had hoped for more land, and in many cases preferred serfdom with compulsory labor on the manor to the compulsory purchase of land now adopted. Each village community was, when the change was finally completed at the accession of Alexander III., compelled to purchase its land in common, paying to the government besides the interest of six per cent, a small annual installment, which will redeem the land in forty-nine years, and which is assessed with the other taxes on each village community. The nobles were paid for the land in government bonds of different kinds.

Thus the old village community was continued, and to-day the "Three Field System," with a lot around each house, owned individually; long, narrow, scattered strips of ploughland allotted periodically, and pasture land held in common, is still the usual mode of Russian agriculture. And the Russian peasants seem to prefer this to individual ownership, which is spreading only slowly through the division of communities and the purchase of land from the nobility and the mortgage banks.

While the effects of this radical change have not yet worked themselves out, it is evident that it caused increased demands for mortgage banking facilities on the part of nobles, who having lost their serfs were now compelled to adopt the West European mode of farming by hired laborers, and who had, in most cases, their land already mortgaged to somebody.‡

*According to the Russian usage of the word "soul," it included only the male peasants paying the capitation tax.

†Anatole Leroy-Beaulieu, "*Das Reich der Zaren*," Berlin, 1884, p. 349. I have not seen the original French edition of this excellent book.

‡In 1859 about fifty-nine per cent of the land of the nobles was, according to Leroy-Beaulieu (p. 132), mortgaged to banks, and the remainder often to private individuals.

And thanks to the mortgage banks now established and to the slow and quiet way in which the great reform was accomplished, Russia escaped such a demoralization of its agriculture as that which the Southern States of the Union have but recently recovered from.

Before this time there had been but little organized mortgage banking done, and the "souls" or serfs, rather than the land itself, had been considered as the security. Two banks were founded in 1754, making short term mortgage loans at six per cent. They did not foreclose, but took temporary possession of the property. In 1786, they were amalgamated with another bank to form the Imperial Loan Bank, which made both city and country loans. On lands it loaned at eight per cent, three per cent of which formed a sinking fund to redeem the loan in twenty years. On lots the rate was seven per cent, with redemption in twenty-two years.

In 1797 another, auxiliary, bank was founded which lent from forty to seventy-five roubles per "soul," the loans were made in five per cent, twenty-five year, bonds of the bank itself, which the borrowers then had to sell. This bank lent fifty million roubles, of which only 1,395,000 were outstanding in 1802, when it was united with the Imperial Loan Bank. The new bank was—unfortunately, one would think—permitted to loan also its deposits on land. In addition to this there were two concerns founded, which were not for profit, but to render aid where needed, the Lombards of 1772, and the Establishment for Public Aid of 1775.

In 1841 the Imperial Loan Bank had a capital of 8,581,330 roubles,* in 1851 it held, according to Hübner,† 344,000,000 Thaler (Prussian), and in 1858 it had outstanding loans of 326,000,000 roubles.‡

Up to the Crimean War, these were the only mortgage concerns of Russia proper, and they were successful until

* J. Dede, "*Das Russische Reich*," p. 89.

† O. Hübner, "*Die Banken*," Appendix.

‡ R. Zeulmann, "*Das Landwirthschaftliche Kreditwesen*," p. 105.

1857, when the depreciation of the paper currency got them into trouble, and the government had to come to their assistance by repaying a large amount previously borrowed.

In 1859 a commission was then appointed to study the question, and for three reasons it recommended the formation of mutual associations: first, because it was supposed there would be a good market for the bonds of such association; secondly, on account of the active control of their affairs by the borrowers, who would be mutually liable; and thirdly, because it was thought that between such associations, managed by the previous borrowers themselves, there would be no competition, and thus no temptation to make risky loans.*

Such mutual associations, similar to those of Germany, had long been successfully operating in the Baltic Provinces and in Poland. The credit associations of the nobility of Esthland and Liefland had been founded in 1802 and 1803 respectively, when the Czar loaned them several million roubles at three per cent with which to commence.†

Furthermore, in 1825 one had been founded in Poland with seat at Warschau, similar also to the German Provincial Associations, and this, as well as the preceding ones, is still in successful operation. The members are the proprietors of country estates and are all responsible for the bonds which are given to borrowers when loans are made. These bonds are redeemable in paper roubles, and, with the exception of one issue, of which there was in 1890 outstanding 37,628 roubles at four per cent, they draw five per cent interest. The total amount outstanding in 1890 at five per cent was 112,267,008 roubles.‡

The Credit Association of Kurland, with seat at Mitau, founded in 1832, also resembles the Prussian Provincial

* *L'Économiste russe*, February 1, 1891.

† Bergsøe, "*En Creditforening, etc.*," (Copenhagen, 1835), p. 94. R. Zeulmann, "*Das Landwirthschaftliche Kreditwesen*," Berlin, 1866, p. 105.

‡ W. Saling, *Berliner Börsenjahrbuch* for 1891. Cf. also "*Statistique du Crédit à longue terme en Russie*," St. Petersburg, 1894.

Associations. The members are mutually liable. Loans are made of not more than one-half the value of the property. When either principal or interest is paid on any of the bonds of this, as also of the preceding association, a tax of five per cent of the amount paid is levied by the Russian government. This association had in 1890 outstanding at five per cent 17,982,700 roubles, and 2,044,000 roubles at four and one-half per cent.*

In addition to these four early mutual associations, a number of others were now, after 1857, founded throughout Russia, as follows: In St. Petersburg, in 1861; in Moscow, 1863; in Riga, 1866; another in Riga, 1869; in Reval, 1869; in Warschau, 1870; in Odessa, 1871; in Lodz, 1872; in Kurland, 1875; in Kronstadt, 1875; in Liefland, 1884; in Lubline, 1885; in Kief, 1885; in Kalich, 1886, and in Plotsk, 1887. All these credit associations are for owners of city properties, and are on the same plan as those of Germany and the earlier Russian ones above described.

The most important mutual mortgage concerns of Russia now founded were, however, the Kherson Provincial Bank of 1864, and the large Credit Association of St. Petersburg, founded in 1866.

The former lent fifty per cent of the value of the property, with sinking fund redemption of the loans, either in thirty-four years eleven months, or in thirty-six years six months. The bank charged a commission of one-half per cent. One-half per cent of all loans was paid every year to the sinking fund and one-quarter per cent to the surplus funds. Both five per cent and five and one-half per cent bonds were issued. The outstanding loans of this bank grew rapidly,†

* W. Saling, *Berliner Börsenjahrbuch* for 1891. Cf. also "*Statistique du Crédit à longue terme en Russie*," St. Petersburg, 1894.

† 1865	1,833,000 Roubles.
1870	14,531,500 "
1875	43,065,500 "
1880	48,872,000 "
1885	57,635,000 "
1890	66,864,500 "

and in 1890 it had accumulated a surplus of 4,152,500 roubles. In 1868 the bonds had to be sacrificed by the borrowers at from seventy-two to seventy-seven per cent, but in 1890 the five and one-half per cent bonds were above par and the five per cent bonds, at ninety-nine per cent; it had then outstanding at five and one-half per cent 49,038,000 roubles, and at five per cent 17,102,900 roubles.*

The Mutual Credit Association of 1866, of St. Petersburg, made loans to the owners of landed estates not exceeding one-half the valuation. The loans were redeemable by sinking fund in fifty-six and one-half years and were made in gold bonds of the association. A penalty of one per cent a month was charged for delays in payments due from borrowers. Absolute foreclosure, without redemption, took place after two months' default, and the association was obliged to sell within six months the property so obtained. The bonds were redeemable in the course of fifty-six and one-half years at 125 per cent by annual drawings.

The large scale on which this association was commenced made it an immediate success. The amount of outstanding loans rose quickly to over a hundred million roubles, and the five per cent bonds were sold by the Rothschilds and Bleichroeder in Berlin. The borrowers obtained ninety per cent of the face of the bonds.*

At first all interest and sinking fund installments were payable to the association in gold, but as paper money fell in value, this was found very difficult. In 1881-82 members had to pay as much as seven and eight-tenths roubles in paper for five roubles gold. In 1884 the government therefore came to the rescue of the association, agreeing to loan it 3,800,000 roubles, and the rates to be paid in paper for roubles in gold were now gradually reduced from eight roubles in 1884-85 to seven and one-half roubles in 1886-87; six and nine-tenths roubles in 1887-88, and seven roubles in 1888-89. Since 1880 loans have also been made in paper,

* *L'Économiste russe*, Jan. 15, Feb. 1 and 15, 1891.

and bonds redeemable in paper have been issued, of which were outstanding in 1890 about thirty-six million roubles.*

Of every loan five per cent was retained by the association, and in this manner a capital was obtained; the government further contributing a fund of 5,000,000 roubles in interest-bearing notes of the National Bank, the so-called "Aid Fund." The amount of loans was not to exceed ten times the total of these two funds. The "Aid Fund" at one time sustained a loss of 1,455,695 roubles by embezzlement. Up to 1887, loans of about 150,000,000 roubles had been made, most of the bonds being issued at five per cent. In 1887 a rather expensive but successful conversion took place, these bonds being exchanged for four and one-half per cent bonds redeemable at par instead of at 125 per cent. This absorbed the entire capital and surplus of the association, including the "Aid Fund." In June, 1890, the capital was 501,930 roubles, the special surplus fund, 1,925,642, and the general surplus fund, 1,054,802 roubles.†

The new four and one-half per cent bonds are redeemable in the course of fifty-six years, and can be tendered by borrowers in payment of loans. They are absolutely guaranteed by the government. In 1889 they were quoted in Berlin at ninety-nine and three-tenths per cent, and in 1890 at 101 per cent.

The mutual credit associations were thus established in Russia, and in fact, most of the city loans are now made by them, but owing to the difficulties due to the fall in the value of paper currency, which was felt by any association issuing gold bonds, it was in 1890 decided to have the large

* W. Saling, *Berliner Börsenjahrbuch*, 1891.

† On July 1, 1890, the association had outstanding:

Long time loans in coin of	101,025,324 Roubles.
In paper currency	36,623,300 "
Short time loans	7,404,846 "
It had outstanding:	
Five per cent coin bonds	6,616,200 "
Four and one-half per cent coin bonds	94,417,100 "
Five per cent currency bonds	36,623,300 "

(*L'Économiste russe*, as above.)

association of St. Petersburg amalgamated with the National Land Bank of the Nobility, a government bank, issuing five per cent bonds, which had been founded in 1886.

There are now two national mortgage banks in Russia, this one for the nobility, which has, aside from the loans of its special section, outstanding loans of 319,000,000 roubles, and another bank for the peasantry founded in 1883, which has loans outstanding of 49,000,000 roubles.

The former was by law of 1889 authorized to issue bonds with prizes, as is customary on the continent of Europe, where the lottery business is not regarded as in America, and in 1890 there were eighty millions of prize bonds outstanding at five per cent. This bank had in 1890 a surplus of 1,292,708 roubles.

The one for the peasantry had in 1891 a capital of 2,807,439 roubles, but had already then had to assume properties to the amount of six million roubles.* It seems, therefore, too early to pronounce the vast mortgage loan business done by the Russian government an unqualified success.

The private mortgage banks, however, make an excellent showing. These date from the period succeeding the payment of the French indemnity, and are doubtless to be attributed to the thrifty Germans, to whom Russia owes most of her commerce. That of Kharkow was founded in 1871 and nine others† immediately afterward. Each of these banks is limited to a certain district in such a manner that only two banks can compete making loans at any one point.

They loan up to sixty per cent of the valuation, and can foreclose, without redemption, after three and one-half months' default, which the borrower, however, can avoid at any time before the sale by paying a penalty of one per cent. The interest is paid semi-annually, and loans are

* *L'Économiste russe*, Dec. 15, 1890.

† Poltava, St. Petersburg, Moscow, Bessarabia-Tauria, Nijnii-Novgorod-Samara, Kief, Vilna, Yaroslaw-Kostroma and Don. Furthermore, in 1873, that of Saratov-Simbirsk, now in liquidation.

made on both lands and town property for periods varying from eighteen years and seven months to sixty-one years and eight months.

The borrowers must pay each year one-half per cent to form a surplus fund until one-tenth of the loan has been amortized or covered, then one-half per cent of nine-tenths, then one-half per cent of eight-tenths, etc., until the loan is six-tenths paid up.

The loans and the bonds draw the same rate of interest, and the loans are made in bonds which are sold for the borrower's account.

Most of the banks must set aside from five to ten per cent of their net earnings to the surplus each year, until this shall reach eight per cent of the capital.

The business of these banks increased very rapidly.* Some bad loans were made, but the rise in the value of property from 1870 to 1882 protected them. In the decade from 1873 to 1883 they lost four and one-half million roubles on foreclosures, but since then have been loaning with greater care.

A complete list of dividends shows that although a large surplus has been accumulated by all, they have still paid from seven to fifteen per cent.

The loans of any bank must not exceed ten times its capital, and the banks have had to increase their capital accordingly from time to time. They are subject to the active control of the Minister of Finance.

These banks have had no foreign market for their bonds, and in 1874 these fell to eighty per cent. They, therefore,

* (Million Roubles.)

<i>Loans.</i>		<i>Total.</i>	<i>Capital Stock.</i>	<i>Surplus.</i>
<i>On Land.</i>	<i>On Lots.</i>			
1874 . . . 63.½	28 ½	92.	13.	0.017
1875 . . . 76.	32. ½	108.½	14.	0.141
1880 . . . 152.	48. ½	200.½	24.	1.4
1885 . . . 238.	67. ½	267.	26.½	2.3
1890 . . . 291.	81.	372.	34.½	8.1

(*L'Économiste russe*, April 1 and May 1, 1891.)

combined to limit the total amount loaned in 1874 to thirty million roubles, which caused the bonds to rise to from eighty-six to eighty-seven per cent. In 1875 they were quoted at from ninety-three to ninety-five per cent, and, excepting the period of the Turkish War, they remained from then on at about this rate until 1885. In 1890 they were quoted at from 103 to 104 per cent.

Up to 1885 the banks had issued almost entirely six per cent bonds, and in January, 1890, two-thirds of the bonds drew this rate. A conversion to five per cent was effected that year, and as the bonds were payable on giving notice, the bondholders had to choose between receiving cash or five per cent bonds at par, an operation by which two and one-half million roubles per annum were saved for the borrowers.

What also probably caused the bonds to rise after the fall of 1873 was the formation of the Central Mortgage Bank of St. Petersburg, in April, 1873, in order to assist the smaller mortgage concerns that were unable to market their bonds at a fair price. It had a capital of 16,000,000 roubles, of which forty per cent was at once paid in. About one-third of the shares belong to the government. Further payments on the stock were made in 1876, 1877 and 1887, so that the capital is now fully paid in.

This bank makes no direct mortgage loan whatever itself, it only issues bonds based on the bonds of the other concerns which are then deposited with the National Bank. The principal and interest of the latter bonds are payable in paper roubles, the bonds of the Central Bank in gold, and it has, therefore, constantly sustained losses caused by the downward course of paper money. It paid in 1873 a dividend of twelve per cent; in 1874, 10.45 per cent; in 1875, 12.65 per cent; and in 1876, five per cent; since then no dividends have been paid. And as the government is to blame for the depreciation of the currency, it was natural enough that it should come to the assistance of the bank in

1887 and pay in 3,000,000 roubles on its shares of the capital stock, thus making them fully paid up, besides refunding to the bank the actual loss sustained up to that time, viz: 3,400,808 roubles. The bank was, however, given to understand that in the future it would have to operate entirely at its own risk.

The respective series of bonds of this bank are redeemable in the course of twenty-seven and one-half, forty-three and one-half, and fifty-four and one-half years. Of five and one-half per cent bonds were in 1890 outstanding and known in Berlin, 7,192,500 roubles, and of five per cent bonds, 31,931,000 roubles. In 1890 the five per cent bonds were quoted in Berlin at ninety-three per cent.*

In 1894 it was finally decided to liquidate this bank. After the market for the bonds of the smaller banks had become good, it was no longer needed. Its gold bonds will be converted into government bonds, and the Russian government will take control of all its assets, with the expectation of realizing perhaps only twenty-five per cent for the shareholders.†

The history of both the mutual and the joint stock mortgage concerns of Russia thus affords an illustration of the misfortune to a country of not having the same monetary standard as the rest of the civilized world, and the rates of interest at which bonds have been issued show a difference of over one-half per cent in favor of the gold bonds, as follows:

Rate of Interest.	Currency Bonds. Total amount issued.— Roubles.	Gold Bonds. Total amount issued.— Roubles.
	1,387,007,452	92,201,600
4 per cent.	none	0.7 per cent.
4½ "	1.1 per cent.	92.6 "
5 "	86.1 "	6.7 "
5½ "	11 "	none
6 "	1.8 "	"

* W. Saling, *Berliner Börsenjahrbuch*.

† *Frankfurter Zeitung*, May 30, 1894. The 5½ and 5 per cent bonds will be exchanged for 3 per cent government bonds with a bonus of 11 and 10 per cent, to compensate for the lower rate of interest. (*L'Économiste européen*, 1894, p. 820.)

Which of the three different systems: mutual credit association, government banks, and private joint stock banks, is likely to gain the day is difficult to tell.

The real test of the strength of a mortgage loan institution is perhaps the rate at which it can obtain money. Up to the last conversion in 1890, the private banks, which for other reasons seem preferable, show inferiority in this respect.* One cause probably is that when loans are made in bonds to be sold at the borrower's expense, sufficient regard is not had to the effect of new bonds on the money market. And another reason is that these banks have limited themselves to Russia alone as a market for their bonds.

At present, however, the bond quotations of the different institutions do not show any marked difference in favor of any except the bonds payable in coin.†

*Bond Quotations, Bank of Moscow—1881-1891:

	Five per cent bonds.		Six per cent bonds.	
	Low.	High.	Low.	High.
1881	84½	87½	99½	100½
1882	79¾	85	94¾	100¼
1883	79¾	83	95	97½
1884	80½	84¾	95¾	98
1885	84	92½	97¾	101½
1886	92	96½	100½	103
1887	92¾	95½	100½	103½
1888	90½	94	99	102½
1889	90¾	94¾	101¼	102½
1890	91¾	97¾	101¾	105

†Bond Quotations, May 8, 1891, as reported by *L'Économiste russe*:

Mutual Associations.	Joint Stock Banks.	Government Concerns.
Kurland bonds, 5 per cent, 102.	Bonds of Russian banks (at time of conversion), 6 per cent, 101½, 102½; 5 per cent, 101½, 102½.	Mortgage bank for the nobility, 6 per cent, 101 3-14, 102. Special section (formerly independent mutual association), 5 per cent, 102½, 102.
Bank of Kherson, 5 per cent, 101½, 102.	Bank of Tiflis, 6 per cent, 101½, 102.	Mortgage bank for the peasantry, 5½ per cent, 102¾.
Polish bonds, 5 per cent, 100, 100½.	Bank of Koutais, 6 per cent, 101½, 102.	Gold Bonds. (Currency Quotations.) Mortgage bank for the nobility, prize bonds, 216 per cent. Special section (formerly independent mutual association), 4½ per cent, 113 per cent.

On the whole the Russian mortgage concerns deserve admiration. In spite of innumerable difficulties, large amounts have been loaned at a trifle over five per cent. And while it is true that it is only through an absolute guarantee by the government that money has been obtained at less than five per cent, and although the peasants are still, where not assisted by the "Popular Banks," in the clutches of the village usurers, it cannot be doubted that the imitation of German methods of mortgage banking as above described has been of immense benefit to the Russian people.

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Chicago.

BRIEFER COMMUNICATIONS.

THE BEGINNING OF UTILITY.

In a recent paper* I discussed the relation of economics to sociology. I tried to show that the place of economics in the hierarchy of the sciences is before that of sociology; the theories of utility and of goods being necessary pre-suppositions in any study of social relations. Professor Giddings contends that there is no independent theory of utility.† Subjective utility, cost and value are all, in his opinion, social products having sociological antecedents. Apart from association, he claims that there can be no such thing as subjective utility. He endeavors to make the theory of utility a part of sociology by showing that only under social conditions can pleasurable feeling be voluminous enough to admit of appreciable distinctions of more or less. The capacity for pleasure, it is claimed, will remain infinitesimal unless the activity of the organism is aroused through concourse, suggestion and imitation. It is assumed that if the organism experiences different degrees of utility, it will be conscious of this difference and recognize the relations existing between them.

This line of reasoning overlooks the fact that the failure to recognize degrees of utility may be due to the intensity of the pleasure, as well as to its lack of clearness and volume. A strong feeling or a passion shuts out comparison as completely as one of infinitesimal importance, just as an intense light may blind as completely as utter darkness. It does not, therefore, follow that a being with intense feelings can compare these feelings and be conscious of degrees of utility. To compare feelings a being must have the power to hold in consciousness two different feelings long enough to recognize their difference. A being which does not possess this power may enjoy every possible degree of utility without having its conduct influenced by their relations. We must, therefore, contrast sharply a capacity for intense pleasures with a power to appreciate degrees of utility. A being with a capacity for intense pleasure, may, however, act on a theory of utility as well as a being who is conscious of degrees of utility. It is, of course, a different theory of utility, and leads to another type of conduct. We are apt to think that there is only one theory of utility, because to us, as social beings, only one of the theories of utility is of importance.

* "The Failure of Biologic Sociology," *ANNALS*, May, 1894.

† "Theory of Sociology," p. 25, Supplement to *ANNALS*, July, 1894.

When we have a number of increments of a commodity we attach but little importance to single increments. We know that if certain increments are taken away the remaining increments will satisfy our wants as completely as before. Our valuation of each increment is determined by the importance to us of the final increment. This is the well-known theory of final utility, according to which each increment of an object has the value of the final increment. A being, however, who has intense feelings, but has not the power of contrasting and comparing these feelings, will act on the theory of *initial* utility; that is, he will value each increment of an object by the importance of the first or initial increment to him. The formula of the theory of initial utility is: each increment of a commodity has the value to its possessor of the first or initial increment.

Suppose a hungry lion has captured a deer and another animal attempts to take a portion of it. The lion will resist this act fiercely. He will not reason that a small portion of the deer will satisfy his hunger and that the portion which the other animal desires will not affect him. He attaches the same importance to every portion of the deer that he attaches to the first portion he means to eat. When he has satisfied a part of his appetite his action is more moderate, but still he will resist any attempt to take a portion of the deer, with a vigor depending upon his appetite at the time. He always acts on the same theory, and values each portion of what he has left by the importance to him of the first portion of it. There is a gradual fall in the value as the hunger is satisfied, but there is no comparison of the successive states of feeling, and hence their relations to one another have no influence upon the valuation.

Suppose again, a hunter kills a deer. He cuts off a portion and gives it to his dog. He does this because he acts on the theory of final utility. He knows that a part of the deer will satisfy his appetite and that he loses nothing by giving a portion of it to his dog. The dog, however, will quarrel with any animal trying to take a part of the flesh given to him, although it may be much more than he can eat. He acts on the theory of initial utility and values each portion of what he has by the importance of the first part to him.

The difference between social and unsocial beings depends upon their theory of utility. The unsocial being adopts the theory of initial utility, and puts himself thereby in opposition to all other beings. He wants everything he sees, and he values the whole of any object by the utility of its initial increment. He regards anyone as a trespasser who invades his domain and is as hostile to him as he is to anyone trying to get a portion of his food. The peculiarities of primitive economic conditions favor the development of such beings.

Only a few favored localities have free food in abundance, and success in the struggle for existence depends upon the monopolization of these localities. The theory of initial utility aids a being in such a struggle, as it causes him to attach more importance to the exclusive possession of food and locality than he would otherwise attach to them. It promotes contest and activity, and thus leads to a more rapid development of function and desire. The increase of desire localizes a being still more. It causes him to reject the less edible kinds of food, thus reducing the variety of his diet and narrowing the region in which it can be found. So long as these conditions continue there is an increased adjustment to the local environment and a growing opposition in the interests of individuals. Social progress is impossible without a new theory of utility and other economic conditions.

Not only are intense feelings a characteristic of the pre-social state, but an appreciation of degrees of utility is also necessary before toleration, the first step in the social state, is possible. Beings must be conscious of the fact that additional quantities of articles have less importance to them than the first portion before they will tolerate the presence of other beings. They must associate the consumption of other individuals not with the initial increments of what they have, but with the final increments. Each being thinks of the others as consuming those portions of commodity which have little or no value to him. The conscious opposition between beings is thus reduced to a minimum and the favorable effects of association are allowed their due weight. Furthermore, the pain connected with driving others away from the locality and food becomes greater than the pain of losing the final increments of the food supply. The consciousness of degrees of utility and the acceptance of the theory of final utility thus opens the way for social activity.

Subjective cost, however, is of much later origin and has social antecedents. Professor Giddings speaks of the pain, weariness, terror and physical mutilation which accompany success in the struggle for existence as though they were costs.* This is an error. True cost is not the pain that accompanies the struggle for food or its consumption, but rather the pains due to endeavors to increase the food supply. Costs arise only when acts of production begin. They are not the whole of the pains of existence, but only those that are consciously undergone for the purpose of increasing the supply of commodities. They can arise only when the growth of social instincts has caused individuals to give up the struggle for the free goods of the local environment and has led them to co-operate in the better

* *Op. cit.*, page 28.

utilization of the general environment where conscious effort will give a greater surplus, even though true costs have now become a factor in the calculations of individuals.

When Professor Giddings says that man has "an enormously greater capacity for pleasure than any rival,"* he evidently has total utility and not initial utility in mind. So also when he says, "Pleasure admits of indefinite increase, pain of indefinite decrease," he is thinking of the total quantity of pleasure and pain and not of the intensity of any particular variety of pleasure or pain. His argument, however, demands that the intensity of pleasure be increased by social action. He must show that the capacity for pleasure would remain infinitesimal but for social conditions. Social forces do undoubtedly increase total utility, but they do it not by increasing the intensity of the initial utility, but by raising the utility of the subsequent increments. The laws of variety and harmony of consumption produce this result in spite of the lowering of the initial utility which accompanies social progress. A high initial utility and a large total utility are not in harmony. The one indicates primitive and the other advanced social conditions.

It is easy to exaggerate the importance of association and co-operation by overlooking the abundance of free goods which certain localities afford to primitive unsocial beings. The struggle for the possession of these regions develops intense pleasures, but prevents any marked increase of total utility. Toleration, association and imitation belong to a later stage of development when degrees and sums of utility are objects of conscious calculation. Production can then begin; true costs arise and the amount of the surplus instead of the mere intensity of pleasure determines action. These forces cause beings to utilize the general environment instead of to struggle for the possession of a favorable local environment. There is a loss of the free goods which the local environment might afford to a few individuals, but it is more than compensated by the increase in total utility which the new conditions afford. Society begins when the economic tendencies favor an adjustment to the general environment and thus make the surplus of the whole society instead of that of certain individuals the determining element in the struggle for existence.

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PRESENT CONDITION OF SOCIOLOGY IN THE UNITED STATES.

In a discussion of the present condition of sociology in this country, we must not confound sociology with social problems. Social problems are questions growing out of abnormal social relations. Sociology

* *Op. cit.*, page 28.

is the science which proposes to investigate social relations. There is at present a great deal of thinking about social problems, much of which is entirely independent of a sociological science. Our purpose is to set forth the present condition of thought about sociology.

Even among those who have studied the science most, there are vague and conflicting notions about its method and what it proposes to do. Some hope to extract from metaphysics a "golden medical discovery" that will cure all social aches and pains, or at least a formula that will solve the most intricate social problem. Others, mistaking a means for an end, think that the sole business of sociology is to go nosing about in the slums to find out how the other half lives. Some persons condemn the science because of this latter conception. This is the idea and the feeling of a certain professor of English, who is reported to have said, "What is the use of sending out students of sociology to observe the conditions of life among the poor, when Dickens and Thackeray have done all that work much better than they can hope to do it?"

Several years ago Professor Sumner, of Yale College, defined sociology as "the science of life in society; it investigates the forces which come into action wherever human society exists. Its practical utility consists in deriving the rules of right social living from the facts and laws which prevail by nature in the constitution of society;" and Professor Giddings, of Columbia College, says that "general or philosophical sociology is a broad but penetrating and thorough scientific study of society as a whole—a search for its causes, for the laws of its structure and growth, and for a rational view of its purpose, function, meaning or destiny." We shall see that among sociologists there is a wide difference of opinion in regard to the content of these definitions. If one expects to find, in present sociological thought, a definite conception of the nature and function of the science of sociology, or a clear body of thought concerning its scope, its method and its object, he will be disappointed. It takes a science a long time to free itself from charlatanry and metaphysics, and to formulate precise definitions. This is the task which sociology is now trying to accomplish. And while it is thus engaged it cannot make great headway in popular favor.

With this preliminary suggestion of what we shall find, let us now examine the condition of thought among sociologists themselves. In order to determine this condition, I recently wrote to all the teachers of sociology in the United States, and to others known to be deeply interested in the subject and entitled to express an opinion, and asked them to answer the following questions:

1. Which term do you prefer, Social Science or Sociology?

2. Do you think the study is entitled to be called a science?
3. In what department does it belong?
4. What is its relation to Political Economy, History, Political Science, Ethics?
5. How much of the subject, if any, should be taught in the high school?
6. In what year of the college course should the subject be introduced, and what subjects do you regard as directly preparatory?
7. What is the nature of the course that should be offered to undergraduates?
8. Would you divide the subject into descriptive, statical and dynamic, and in what sense do you use each of these terms?
9. What relative importance does the treatment of the dependent, defective and delinquent classes hold?

Notwithstanding the disagreeable suggestion of an unauthorized examination which my letters must have raised, they received from most of my correspondents immediate attention. About forty have replied. Of these, three pleaded knowledge insufficient to entitle them to an opinion. All the others gave answers to at least some of the questions. From the nature of the case, answers could not be otherwise than brief. In this respect one reply is a model. One would scarcely think that the fourth question, What is the relation of Sociology to Political Economy, History, Political Science and Ethics, could be dealt with briefly. But one writer disposes of it as follows: "The relation of Sociology to Political Economy, History, etc., is *close*." On the whole, however, the replies are far more complete and more carefully written than I expected to receive. A brief summary of the opinions expressed will illustrate the condition of thought about sociology among those who ought to be informed. Do not anticipate from this summary a clarification of sociological ideas, but look rather to see the confusion in which sociological thought is involved. We shall take up each question separately.

In answer to the first question, only six expressed themselves as preferring the term Social Science. Among the reasons offered for preferring this term are its breadth and the popular prejudice against an increase in the number of the "ologies." Three find a use for both terms, two using them interchangeably. Still another writes, "Personally I prefer neither, but should like to see the term Politics used in the broad Aristotelian sense, reserving the term, Political Science for the narrower region relating to governmental relations." The great majority, however, are in favor of using the name Sociology because, they say, it is one word, and has also its adjective, sociological. While not assuming so much as "Social Science," it suggests

more unity, and distinguishes itself from several social sciences. Moreover, it has been adopted by such men as Comte, Spencer, Ward, Giddings and others. No objection was offered on account of the etymology of the word. The name, then, that seems to have the field is Sociology.*

But is sociology a science? Fully three-fourths of the answers to this question are in the affirmative. Some say it is a "becoming science." Professor John Bascom, of Williams College, writes, "It is a question of degrees. It will do no harm to call it a science if we do not abate our effort to make it one." The definition of science upon which these answers seem to be based is a systematized body of knowledge, or as Professor John R. Commons, of Indiana University, puts it, "The study and classification of a body of facts, with a view to discovering co-existences and sequences." But there is another point of view from which the question may be regarded, namely, Is there a special field for sociology? Does it justify itself by showing a qualitative differentiation from antecedent sciences? Those who recognize this point of view think that sociology either is or is rapidly becoming a science.

How then, we ask, shall this new science be classified? In what department does it belong? Most of the teachers of sociology think it ought to form a department by itself. Some would place it in the department of the social sciences, along with politics, economics, jurisprudence, etc. Others would change the order, making all the social sciences divisions of sociology. On the other hand, Professor Giddings says, "General sociology cannot be divided into special social sciences, such as economics, law, politics, etc., without losing its distinctive character. It should be looked upon as the foundation or groundwork of these sciences, rather than as their sum or as their collective name." Scattering replies place it under psychology, moral

*While adopting this term, some complain of its misuse. Professor G. W. Patrick, of the University of Iowa, writes, "The word Sociology has been much used in this country, unfortunately, I think, as synonymous with the science of Charities and Corrections." And Professor William MacDonald, of Bowdoin College, says, "I prefer the term Sociology, understanding by that term the science of human society. The use of the term to denote systematic inquiry into the subjects of crime, pauperism and labor seems to me narrow, and likely to withdraw attention from more important and more fundamental inquiries." The word "Sociology," as first used by Comte in the "*Cours de Philosophie positive*," was a "name for that part of a positive or verifiable philosophy, which should attempt to explain the phenomena of human society. It was exactly equivalent to 'social physics,' for the task of Sociology was to discover the nature, the natural causes, and the natural laws of society, and to banish from history, politics, economics, etc., all appeals to the metaphysical and the supernatural, as they had been banished from astronomy and chemistry."—Professor Franklin H. Giddings.

and political science, political economy and anthropology. One teacher thinks it belongs under the "humanities," while two say it has no natural boundaries, and is therefore not included in any one department. A general feeling in regard to the question is expressed, perhaps, by Professor John Dewey, of the University of Chicago, who says, "I don't feel at all sure. It would seem well to have it a separate branch, in order to make sure that it received proper attention, but I think its separation a great pity if it means isolation from any of the great subjects mentioned in question four; *i. e.*, Political Economy, History, Political Science and Ethics." "Sociology," he continues, "should be a sort of meeting place for the organized co-operation of these subjects, it supplying the general theory and principles and progress, they filling in the *media axiomata* and the special facts."

These answers indicate the opinion in regard to the matter inquired about in the next question, namely, the relation of sociology to political economy, history, political science and ethics. Those who believe that all these branches are departments of sociology content themselves by merely saying so. Those who regard sociology as an independent science think its function is to co-ordinate the results of these special sciences, or that sociology studies the same phenomena from a different point of view; that is, sociology treats of the phenomena of economics, etc., that are due to the existence of society. For this study history furnishes material. It is the medium through which sociological phenomena must be observed.* "History," says

*But history is dependent upon sociology for its topics and its valuation. "I would like to emphasize this thought," says Professor James R. Weaver, of De Pauw University, "that history may be taught best through some such study as constitutional law, the theory of the state, international law, or sociology." To better indicate the points of view, I give a few answers to this fourth question in full. "I should adopt a classification like that of De Greef. History is sociological evolution. I should say that ethics looked at, not from an historical and descriptive standpoint, but from that of improvement, is identical with Sociology. It is Sociology working toward the goal of human betterment."—Professor J. R. Commons, Indiana University,

"Political economy is not a department of social science, nor is political science. Both furnish materials to social science, but are to have their independence respected. This last is true of history as a fundamental discipline. Ethics is merely a related subject according to the Intuitionist Conception. Conceived in its evolutionary aspect, it is parallel with political economy and political science, as aiding social science."—Professor D. Collin Wells, Dartmouth College.

"History simply contributes material to this as to all the other social sciences. Ethics, understood not as a science of life, but as a science of conduct, is a department of Sociology. Political economy and politics lie partly within and partly without the field of Sociology, but they are so special, so highly developed, and, moreover, comprise so much that is so technical, that they should not be regarded

one, "is its material, ethics its guide, political economy its interpreter, and a rational system of political science its proposed end." Many express themselves as in doubt about the relation of ethics to sociology. Professor Anthony, of Bates College, says that "Sociology is Political Economy in practice, History in the making, Political Science as an art, and Ethics applied." And this view of ethics is held by Professor Peabody, of Harvard, who describes sociology as ethics applied to the economic situation.

Coming now to the opinions expressed in regard to the time when the study of sociology should be introduced into the schools, we find decidedly more agreement. Only six think any part of sociology should be taught in the high school, and three of these, owing to the absence of suitable textbooks,* think it is of doubtful utility. Professor Commons thinks the high school should teach "descriptive sociology, local, State and federal government, administration, labor, capital, pauperism, etc., the whole subject treated objectively, beginning with the best known facts in the locality and proceeding outward, one-half hour a day more or less during the entire high school course." "The teacher," he says, "could make it an exercise for the entire school, and by alternating the subjects, the teaching force would not have to be enlarged." Professor Charles R. Henderson, of the University of Chicago, would have a brief sketch course introduced very early.† This course should provide for systematic observation of familiar social facts. There is almost general agreement, however, that sociology proper is a branch that cannot be successfully taught outside of the college or university.

As to what year in the college course the study should be taken up, there is some uncertainty and much difference of opinion. Twenty-four

as branches of Sociology, but as independent sciences.—Professor E. A. Ross, Leland Stanford Jr. University.

"Political economy and social science have to do with many questions intimately related, and so affecting each other that it is difficult to separate them. History, recording the evolution of society, must take account of many causes and events, the laws and institutions entering into its structure. The study of social science gives opportunity for pointing out the results of certain forces operating during a certain historic period, and I, therefore, regard the relation of social science and history as very close and important."—Professor H. L. Reynolds, Adrian College.

* Professor A. W. Small and Mr. George E. Vincent, of the University of Chicago, have recently published an excellent textbook entitled, "An Introduction to the Study of Society."

† Professor Henderson says: "Sociology should not be introduced as a formal and separate study before the second year of the college course, and then only in a general survey to precede special social studies. But from the time that children begin to study geography and history in the schools, a teacher acquainted with sociological methods can train pupils in the habit of observing, classifying, naming and reasoning upon the social phenomena."

answer the question directly. Of these, four would have sociology taught in the Freshman year, two in the Sophomore, five in the Junior, and thirteen in the Senior year. Others were uncertain, or felt unprepared to answer. As a matter of fact, most of the courses in sociology offered in the United States are graduate courses, or Senior year electives. As preparatory studies, history takes the first rank, with political economy second. Ethics, psychology and biology are also named by many as desirable, biology, especially, for besides encouraging the scientific habit of mind, it gives a definite and concrete conception of the theory of development as worked out in that science, which is useful in the study of social evolution. Logic, political science, civics and anthropology are each mentioned once. Dr. A. W. Small would have descriptive sociology taught as a preparation for all the special social sciences, and then, after a preparation has been gained in biology, psychology, history, ethics, political science, and, if possible, anthropology, he would introduce the elements of statical and dynamic sociology. Preparatory studies aside, the opinion seems to be all but general that every well-regulated college and university should offer a course in sociology to its undergraduates.

What should be the nature of that course? To this question I received few definite replies. "General summary," "elementary and stimulating," "only those topics which illustrate economics," and other like answers, are too vague to be effectively summarized. The implied opinion seems to be expressed in the reply of Professor C. H. Cooley, of Michigan University, which I quote: "In my opinion, such a course should consist of two parts: first, a concrete survey of historical forms of association from the primitive family—or horde—down to the numerous and complex associations of the present day. This survey should be something more than a condensation of the history of institutions. It should be unified throughout by applying to all institutions certain fundamental questions relating to their sociological character—such as how far they are free, how far coercive, whether vague and indefinite or formal and binding; the physical mechanism of their organization, as transportation and the facilities for the production and preservation of material goods; the psychical mechanism—means for the dissemination and preservation of thought, communication, law, custom, morality and literature. These things have been much studied in themselves, but little as factors of association.

"The second part of the course should attempt a searching and somewhat detailed analysis—a Theory of Association. To show what I mean I would cite the first two volumes of Schäffle's '*Bau und Leben*' as an attempt to work out such a theory. To accomplish an analysis of association is the main end of the study, but I believe that

the concrete historical survey will be found indispensable as an introduction. Let the student pass from historical facts and proximate explanations to a more general and penetrating analysis."

We come now to the question whether, for purposes of study and investigation, sociology should be divided into descriptive, statical and dynamic. Out of twenty-three answers to this inquiry, nine are in favor of such a division, while fourteen are opposed. In the University of Chicago and in the Leland Stanford Jr. University this division is adopted. It will be interesting, therefore, to know in what sense the terms are used. Dr. Small defines the term "descriptive" as applied to sociology as the "correlation of historical and analytical facts about society as it has been and is;" "statical," as "the ideal of society in equilibrium, essential social structure and needs being the criterion;" and "dynamic," as "the doctrine of the application of available social forces for approach to the ideal." Professor Ross defines the terms as follows: "'Descriptive,' a preliminary survey to provide actual data; 'statical,' seeks to distinguish social types, and the forms of institutions, in order to determine the laws of their co-existence and sequence; 'dynamic,' studies the forces underlying social phenomena and causing movement and change, in order to ascertain the laws of their action, and thereby the mode of controlling them for the furtherance of social progress."* The objections urged against this division are that the terms are too vague, not co-ordinate, and that description is not a *division* of science. Professor H. H. Powers, of Smith College, writes: "Description is a necessary part of scientific work, but not a division of the science. The science is necessarily dynamic in its fuller treatment, in that it treats of forces in action, evolution in progress. To lose sight of this for a moment, to explain the family, the state, religion, etc., as accomplished or fully evolved facts is the greatest difficulty we have to meet. To overcome this vicious habit of assuming momentary aspects of social institutions as norms of judgment, we cannot too often or stoutly insist that the science is dynamic, and all its elementary substances plastic, nascent, and ever entering into new combinations. Static studies are not co-ordinate with, but subordinate to this fundamental conception. They are valuable as giving us temporary and local phases of social combinations,

*Professor Dewey says: "I thus divide it. The term descriptive seems to me necessary at present, but I think ultimately all material now put under that head should find a place under statical and dynamic. It appears to me to be a separate head simply in so far as there is a mass of facts whose significance with reference to general principles is not, as yet, seen. Statical, I consider the principles of social organization as such; the structural relations, the morphology. Dynamic is the theory of social movement as such; the functioning of the organs so far as they involve modification of structure,—the physiology."

instantaneous photographs of a moving scene in successive moments. But it takes many such pictures to suggest the moving and changing fact. There is no approximation to equality between a static and a dynamic study."

This point of view is taken by several. A few propose other divisions, as for instance, historical, practical and theoretical; and again, historical, comparative, or descriptive, theoretical and applied. Professor Giddings adopts the following division: Ethnographic, demographic, and social pathology; Ethnographic, in the sense of the general sociology of those savage and barbarous peoples who are organized in herds, clans and tribes; Demographic, as the sociology of the great modern populations which are politically organized in national States; and Social Pathology, as the study of abnormal social phenomena. "Many sociologists," says Professor Giddings, "would maintain that a constructive general sociology can be built up only on the basis of researches in social pathology."

And this leads us to the last question, in regard to the importance of social pathology, or the treatment of the dependent, defective, and delinquent classes, as a branch of sociology. "The treatment of these classes," says Professor Chapin, of Beloit College, "holds a place somewhat analogous to that of pathology in medical studies." And this is the opinion of Professor Henderson,* Professor Peabody,† and many others. To quote again Professor Giddings: "Social pathology has for the sociologist the same importance that physical or mental abnormality or illness has for the physiologist or the psychologist. The abnormal reveals and defines the normal." On the other hand, there are those who deny to social pathology this important place. "The treatment of these classes," says Professor James W. Cain, of St. Johns College, "would come more fittingly under political science, or better still, under practical politics. With the treatment of any class sociology can have nothing to do." To the same effect and more emphatically, Professor Powers writes: "Sociology is not social pathology. The tendency to confound the two is contrary to etymology and all scientific precedent and experience. We shall never understand the abnormal till we have understood the normal and determined the norm

* Professor Henderson's view is stated as follows: "As there is normal anatomy, physiology and hygiene of the sound and growing body, so there is a morbid anatomy, physiology and therapeutics of the broken and diseased body. Study of the abnormal must be carried on in relation to the study of the natural life of society, and social pathology thus comes to be a special department under general sociology; statical, and dynamical."

† "The treatment of charity," says Professor Peabody, "must be preliminary and subordinate to the larger question of those who can help themselves. It is the pathological side of the subject."

from which to measure the degree of departure. The study of dependents, etc., has failed both of scientific accuracy and profitable reforms on account of the variously vague notions regarding normal man and the consequent direction which reform should take. Those who begin with the study of the abnormal, usually assume, at least unconsciously, that the normal is largely present in society and is static. The abnormal needs, therefore, to be conformed to it. As a matter of fact, the normal does not exist except as an evolving fact, and the abnormal is an incident of it, a lateral moraine of the moving glacier of society. Only the glacier and the law of its movement can explain the moraine. Social pathology is an exceedingly important science belonging to a secondary group—criminology, y of classes, etc."

This brief presentation of many conflicting opinions is far from satisfactory. But my task is not to clear up ideas about sociology, but to show the chaotic condition of sociological thought.

The inability of sociology to answer certain questions, scientific and pedagogic, only shows what every sociologist admits, that the science is in a more or less undefined and tentative position. It does not disprove the existence of the science. "Sociology exists," as Herbert Spencer wrote, "because there exists a social organism." It is still a very incomplete science. The same may be said of all the other concrete sciences. Sociology is far behind many of them, but they have all passed through their formative periods, and faced the objections of irrelevancy and futility. There was a time when physics and astronomy "belonged to the divine classes of phenomena in which human research was insane, fruitless and impious." But they have outlived these objections. And so also will sociology.

Chicago.

IRA W. HOWERTH.

THE IMPROVEMENT OF COUNTRY ROADS IN MASSACHUSETTS AND NEW YORK.

The improvement of country roads is a subject that is rightly receiving a large amount of attention on the part of scholars and men of business. The marked inferiority of the highways in America as compared with those of European countries has led to an earnest attempt by several States to inaugurate a reform. What has been done is but a beginning; the demand for better roads may be expected to strengthen with the increase of intelligence on the subject and as the necessity for them becomes greater because of the growth in the density of population. More has been done by New York and Massachusetts than by the other States, and the laws passed last year by these two States may well be referred to.

Massachusetts has frequently been in the van of movements for reform, and so she is in the attempt to secure good roads. The Legislature, in 1892, passed "An Act to Establish a Commission to Improve the Highways" of the Commonwealth. This commission made a report, February, 1893,* in which were discussed the topography of the State, the road material of Massachusetts, the condition of Massachusetts roads, the economics of Massachusetts roads, and methods of construction. The report was made by George A. Perkins, W. E. McClintock and N. S. Shaler, and contained a good deal of valuable information.

In June, following this report, the Legislature passed an act establishing a permanent "highway commission [of three men] to improve the public roads" and defining its powers and duties. The main features of this act are contained in section six, which reads as follows:

"Whenever the county commissioners of a county adjudge that the common necessity and convenience require that the Commonwealth acquire as a State highway a new or an existing road in that county, they may apply by petition in writing to the Massachusetts Highway Commission, stating the road they recommend, and setting forth a detailed description of said road by metes and bounds, together with a plan and profile of the same. Said commission shall consider such petition, and if they adjudge that it ought to be allowed, they shall in writing so notify said county commissioners. It shall then become the duty of said county commissioners to cause said road to be surveyed and laid out in the manner provided for the laying out and alteration of highways, the entire expense thereof to be borne and paid by said county. Said county commissioners shall preserve a copy of such petition, plans and profiles with their records for public inspection. When said commission shall be satisfied that said county commissioners have properly surveyed and laid out said road, and set in place suitable monuments, and have furnished said commission with plans and profiles, on which shall be shown such monuments and established grades, in accordance with the rules and regulations of said commission, said commission may approve the same, and so notify in writing said county commissioners. Said commission shall then present a certified copy of said petition, on which their approval shall be indicated, together with their estimates for constructing said road and the estimated annual cost for maintaining the same, to the Secretary of the Commonwealth, who shall at once lay the same before the Legislature, if it is in session, otherwise on the second Wednesday of January following. If the Legislature makes appropriation for constructing said road, said commission shall cause said road to be constructed in accordance with this act, and when completed and approved by them, said road shall become a State highway and thereafter shall be maintained by the Commonwealth under the supervision of said commission."

Massachusetts has thus established a State Commission, one of whose powers enables it to co-operate with the county commissioners in the conversion of the more important roads into State highways under State control. The commissioners appointed in 1892 were reappointed under the act of 1893.

* "Highways of Massachusetts." Report of the Commission to Improve the Highways of the Commonwealth. February, 1893. Pp. 238. Boston: 1893.

New York is trying the county system, as recommended by Governor Flower. The Legislature passed an act in the spring of 1893,* by means of which

"The board of supervisors of any county may, by a concurring vote of at least a majority of the members thereof, by resolution, adopt the county road system, and shall, as soon as practicable after the adoption of such resolution, cause to be designated as county roads such portions of the public highways in such county not within an incorporated village or city as they shall deem advisable. . . . The roads so designated shall, as far as practicable, be leading market roads in such county."

Each county adopting this system shall have an engineer appointed by the board of supervisors. "The expense of maintaining the county roads of each county shall be a county charge."

New York now has three systems of road-making: (1) The town system by which the taxpayers are allowed to work out their assessments; this is known as "The Labor System of Taxation." (2) The town system having "The Money System of Taxation." (3) The county system as provided for by the law of 1893. The adoption of the money system of taxation is optional with the town; the county system, as stated above, depends upon the will of the county supervisors.

Shortly after the passage of the law making the county system permissive, the New York Legislature provided for the publication and distribution of a "Highway Manual of New York,"† containing a compilation of the highway laws of the State, defining the powers and duties of highway officers and resident taxpayers, and giving diagrams and practical suggestions and directions for grading, building roads, etc. The manual, as prepared by N. S. Spalding, assisted by three Commissioners of Statutory Revision, Daniel Magone, Charles A. Collin and John J. Linson, is a well-arranged compendium of the laws of New York. The part devoted to "Practical Suggestions on Highway Construction and Maintenance," though well done, does not equal the work of the Massachusetts Commission. The manual of New York was distributed free of charge among town clerks and the highway commissioners and overseers throughout the State, and was sold to other persons at seventy-five cents a copy. It was a wise method of promoting a greater intelligence concerning good roads.

It is yet too early to judge of the workings of these laws. They are both permissive, rather than mandatory in character. They put both the State and county systems on trial. The results will be noted with interest.

EMORY R. JOHNSON.

University of Pennsylvania.

*Laws of 1893, chapter 333.

†"Highway Manual of the State of New York." Published in pursuance of Chapter 655 of the Laws of 1893. Pp. 359. Albany: 1893.

PERSONAL NOTES.

AMERICA.

Bowdoin College.—Mr. Henry Crosby Emery has been appointed Instructor in Political Economy and Sociology at Bowdoin College, Me. He was born December 21, 1872, at Ellsworth, Me. He attended the Ellsworth public schools and in 1888 entered Bowdoin College, from which he graduated with the degree of A. B. in 1892. The next year he studied at Harvard, receiving the A. M. degree in 1893. During the past year he has held a University Fellowship in Social Science at Columbia College.* Mr. Emery is a member of the American Economic Association and of the American Academy of Political and Social Science.

Chicago, Ill.—General Matthew Mark Trumbull, distinguished as soldier, in the political world and as a writer on social and economic questions, died in Chicago, on May 9, 1894. He was born in London, on December 30, 1826. His parents were so poor, that after obtaining a very elementary education, he was started to work at the age of thirteen. He took an active part in the Chartist movement, and as a young man came to America to secure that chance in life which he did not have in England. He landed at Montreal, Canada, and started to work as a day laborer on the railroad. The following year he went to Boston, where he was also employed as a laborer. While in Canada he taught school in the winter, perfecting himself by studying at night. At the outbreak of the Mexican War he enlisted as a private in the United States Artillery. After the war he was employed as a laborer in the South and West, devoting his spare time to studying law and in the winter teaching school. He was finally admitted to the bar and started practicing in Iowa. In 1857 he was elected to the Legislature. When the Civil War began he again enlisted and was chosen captain. He soon rose in rank on account of his distinguished services and became successively lieutenant-colonel, colonel and brigadier-general. After the war General Trumbull was elected District Attorney and was appointed Collector of Internal Revenue for Iowa by President Grant.

General Trumbull edited the "Current Topics" department of the *Open Court* from May, 1890, until his death. Besides contributions to the *Arena*, *Nineteenth Century*, etc., he wrote:

*See *ANNALS*, vol. iv, p. 467, November, 1893.

"*The Free Trade Struggle in England.*" Chicago, 1882. Second edition. Pp. 280. 1892.

"*The Ethics of Legal Tender.*" Open Court, Vol. VII.

"*The Decline of the Senate.*" Open Court.

"*Pensions for All.*" Popular Science Monthly.

"*Earl Grey on Reciprocity and Civil Service Reform.*" Pp. 27.

"*Wheelbarrow.*" Pp. 303. Chicago, 1894.

"*The Parliament of Religions.*" Monist, April, 1894.

Chicago University.—Mr. Charles Thompson Conger, formerly Docent in Political Geography at the University of Chicago, has been advanced to Assistant in History and Political Geography. Mr. Conger was born in New York City, on December 14, 1863. He attended the New York public schools, and in 1885 entered the University of Minnesota, from which he graduated in 1890 with the degree of A. B. The two years following he acted as Secretary to the Board of Education of Minneapolis. Mr. Conger then went abroad to study, spending 1892 at the University of Oxford and 1893 at the University of Berlin. In the latter year he became Docent in Political Geography at the University of Chicago.

Mr. Conger is a member of the National Geographical Society, of Washington, D. C. He has written:

"*Geography at the World's Fair.*" The Geographical Journal, February, 1894.

Mr. John Cummings, who for the past year has been Senior Fellow in Political Economy at the University of Chicago, has been appointed Reader in Political Economy at that University. He was born on May 18, 1868, at Colebrook, Coos County, N. H. His early education was obtained at the public schools of Woburn and Lynn, Mass. In 1887 he entered Harvard University and graduated with the degree of A. B. in 1891. During 1891-93 he pursued post-graduate studies at Harvard, receiving in 1892 the A. M. degree. During the past year he studied at the University of Chicago, and in June received the degree of Ph. D.* His thesis was on the "*United States Poor Laws.*" He has also written:

"*Monetary Standard.*" Journal of Political Economy, June, 1894.

Mr. Howard Benjamin Grose, formerly Instructor in History in the University Extension Faculty of the University of Chicago, has been advanced to the position of Assistant Professor of History. Mr. Grose was born at Millerton, Dutchess County, N. Y., on September 5, 1851. Most of his early education he obtained by study at home in the evenings. In 1870 he entered the old University of Chicago, having spent a year in the preparatory school of that University. After four years

*See below p. 134.

there he entered the University of Rochester, in 1875, and received in 1876 the degree of A. B. from that college. In 1881 he received from the University of Rochester the degree of A. M.

From 1877 to 1880 he was New York correspondent of the *Chicago Tribune*, and from 1880 to 1883 was on the editorial staff of the *New York Examiner*. The next four years he was pastor of the First Baptist Church of Poughkeepsie, N. Y., and from 1888 to 1889 was pastor of the Fourth Baptist Church of Pittsburgh, Pa. In 1890 he became President and Professor of Philosophy at the State University of South Dakota, which position he resigned in 1891 to go to Berlin to study history. He returned in 1892 to become Instructor in Modern History in the Extension Faculty of the University of Chicago.

Rev. Charles Richmond Henderson has been advanced from Assistant Professor to Associate Professor of Social Science at Chicago University. Professor Henderson was born at Covington, Fountain County, Ind., on December 17, 1848. After studying at the Lafayette (Ind.) High School, he entered the old University of Chicago, from which he received the A. B. degree in 1870, and the A. M. degree in 1873. The same year he received the degree of B. D. from the Baptist Union Theological Seminary and ten years later (1883) the degree of D. D. from the same institution.

From 1873 to 1882 Dr. Henderson was pastor of a Baptist church in Terre Haute, Ind., and from 1882 to 1892 of the Woodward Avenue Baptist Church in Detroit, Mich. He resigned his last charge to become Recorder and Assistant Professor of Social Science at the University of Chicago. Professor Henderson has always been active in charitable and educational work. For twenty years he served on the Board of State Missions (ten in Indiana and ten in Michigan) and for ten years was a trustee of Kalamazoo College. He has served also on the Board of Direction of the Rose Orphan Home, the Terre Haute Society for Organizing Charity, the Michigan House of Industry for Discharged Prisoners and the Detroit Association of Charities. He acted as Chairman of the Arbitration Committee between the Detroit Street Car Companies and their employes.

Professor Henderson has written much for the daily papers, especially the *Detroit Free Press*, on social questions. He is the author also of the following:

"*Pauperism*." Baptist Review, 1880.

"*Methods of Help for Young Men in Cities*." Proceedings of State Y. M. C. A., Michigan, 1891.

"*Women's Work*." Science, 1892.

"*Methods of Reform*." Proceedings of Michigan Board of Charities and County Agents.

"*Methods of Child Saving.*" Report to Board of Rose Orphan Home.

"*Dependents, Defectives and Delinquents.*" Pp. 272. Chicago, 1893.

"*On Charity Organization and the Churches.*" Proceedings of the National Conference of Charities and Corrections held at St. Louis.

"*The Argument Against Public Out-Door Relief.*" Proceedings of the National Conference of Charities and Corrections held at Indianapolis.

"*Industrial Education as a Preventive of Crime.*" Detroit National Prison Congress.

"*Comparative View of Public and Private Charities.*" Proceedings of the International Congress of Charities and Corrections, Chicago, 1893.

"*Individual Efforts at Reform not Sufficient.*" Proceedings of the Religious Congress, Chicago, 1893.

"*The Church and the Workingman.*" Evangelical Alliance, 1893.

"*The Relation of Trades-Union Men to the Church.*" Chautauqua Herald, August, 1893.

Mr. William Hill * has been advanced to the position of Instructor in Political Economy at the University of Chicago. He has recently published:

"*First Stages of the Tariff Policy of the United States.*" Publications of the American Economic Association, Vol. VIII, No. 6, November, 1893. Pp. 162. Ithaca, N. Y.

"*Protective Purpose of the Tariff Act of 1789.*" Journal of Political Economy, December, 1893.

Mr. Francis W. Shepardson, formerly Reader in History at the University of Chicago, has been advanced to Assistant in History in the University Extension Faculty. Mr. Shepardson was born at Cheviot, Cincinnati, Ohio, on October 15, 1862, and obtained his early education at the Granville, Ohio, public schools. He graduated from Denison University with the degree of A. B. in 1882 and received the same degree from Brown University the following year. In 1886 he received the degree of A. M. from Denison. From 1883 to 1887 he taught in the Young Ladies' Institute at Granville, Ohio. For the three years following he was editor of the Granville *Times*. In 1890 he entered Yale University and received in 1892 the degree of Ph. D.† The same year he was appointed Docent in History at the University of Chicago. Dr. Shepardson has written:

"*Is the Puritan Element Overestimated?*" Denison Quarterly, January, 1893.

* See ANNALS, vol. iv, p. 458, November, 1893.

† See ANNALS, vol. iii, p. 242, September, 1892.

"*The Traveling Library and How to Use It.*" University Extension World, March, 1893.

"*The Traveling Library.*" University Extension, September, 1893.

"*Graduate Work in the University of Chicago.*" Denison Quarterly, January, 1894.

He has also been connected in an editorial capacity with the *University Extension World*, of Chicago.

Dr. Thorstein B. Veblen* has been advanced from the position of Reader in Political Economy to that of Instructor in the same subject at the University of Chicago.

Mr. George Edgar Vincent has been appointed Assistant in Sociology in the University of Chicago. He was born at Rockford, Ill., on March 21, 1864, and studied in the public schools of Plainfield, N. J., and in Dr. Pingrey's school, at Elizabeth, N. J. He entered Yale College in 1881, graduating with the degree of A. B. in 1885. Since 1889 he has been Vice-Chancellor of the Chautauqua System of Education, and since 1892 he has been pursuing post-graduate studies at the University of Chicago. During the past year he held a University Fellowship in Social Science.† Mr. Vincent is a member of the American Academy of Political and Social Science.

In collaboration with Professor Albion W. Small, he has just published:

"*An Introduction to the Study of Society.*" Pp. 375. New York, 1894.

Colby University.—Dr. James W. Black‡ has been appointed Professor of History and Political Economy at Colby University, Waterville, Me.

He has recently published:

"*Historical Sketch of Georgetown College,*" in the Bureau of Education monograph on "Higher Education in Kentucky."

He has translated Laveleye's "*La Question monétaire,*" and is at work upon a translation of Laveleye's "*La Monnaie et le Bimétallisme international.*"

University of Colorado.—Dr. James A. McLean has been appointed Professor of History, Economics and Political Science at the University of Colorado, at Boulder. He was born August 2, 1868, in Middlesex County, Ontario, Canada, and obtained his early education at the Collegiate Institute, Strathroy, Ontario. From 1888 to 1892 he studied at the University College of Toronto, receiving the B. A.

*See ANNALS, vol. iv, p. 649, January, 1894.

†See ANNALS, vol. iv, p. 314, September, 1893.

‡See ANNALS, vol. iii, p. 373, November, 1892.

degree in the latter year. The following two years he pursued post-graduate studies at Columbia College, New York, and received from that institution the degree of M. A. in 1893 and the degree of Ph. D. in 1894.* Professor McLean, in addition to his position at Colorado, is Examiner in Political Science in the University of Toronto.

Columbia College.—Mr. Arthur Morgan Day has been appointed Assistant in Political Economy and Social Science at Columbia College. Mr. Day was born on April 12, 1867, at Danbury, Fairfield County, Conn. He attended the public schools in his native town, and in 1888 entered Harvard University, where he studied four years as an undergraduate, receiving in 1892 the degree of A. B., and two years as a graduate student, receiving the A. M. degree in 1894. The past year he has been Assistant in History at Harvard.

Cornell University.—Dr. Herbert Tuttle, Professor of Modern European History, of Cornell University, died on June 21, 1894. He was born at Bennington, Vt., on November 29, 1846. His early education was obtained at public and private schools in Bennington and in Burlington, Vt., and Hoosic Falls, N. Y. He studied at the University of Vermont, graduating in 1869 with the degree of A. B. He also received in after years the degrees of A. M. and L. H. D. After leaving college he engaged in newspaper work for ten years. Then, in 1880, he was appointed Lecturer on International Law at the University of Michigan. The following year he became Associate Professor of Institutions and International Law at Cornell University. In 1887 he was made Professor of the History of Political Institutions and of International Law at Cornell, and in 1891 became Professor of Modern European History. Professor Tuttle was a member of the American Historical Association and of the Société pour l'histoire diplomatique. Besides numerous articles in periodicals, Professor Tuttle wrote several works on German history:

"*German Political Leaders.*" Pp. 260. New York, 1876.

"*History of Prussia to the Accession of Frederick the Great.*" Pp. 498. Boston, 1884.

"*History of Prussia under Frederick the Great.*" 2 Vols. Pp. 408 and 334. Boston, 1888.

University of Illinois.—Dr. David Kinley,† who held last year the Assistant Professorship of Political and Social Science at the University of Illinois, has been promoted to a full professorship, and is now in charge of the department.

Johns Hopkins University.—Dr. Jacob H. Hollander has been

* See below p 134.

† See ANNALS, vol. iv, p. 307, September, 1893.

appointed Assistant in Economics at the Johns Hopkins University. Dr. Hollander was born in Baltimore on July 23, 1871. He attended the public and private schools in Baltimore, and entered Johns Hopkins University in June, 1888. Three years later he received the degree of B. A. He continued his university studies there, holding a University Scholarship for the two years, following and for the next year (1893-94) a Fellowship in Economics. In June, 1894, he received the degree of Ph. D.* He was then appointed to his present position. During October and November, 1894, he is to take Professor Clark's classes at Amherst.

Dr. Hollander is a member of the American Economic Association and of the American Academy of Political and Social Science.

He has written the following works of an economic character:

"*Municipal Gas Works in the United States.*" The Independent, January 21, 1892.

"*Mill's Fourth Fundamental Proposition Concerning Capital.*" Johns Hopkins University Circular, May, 1893.

Chapters on "*The Industries and Institutions of Maryland,*" in "*Maryland and Its Resources, Industries and Institutions.*" Baltimore, 1893.

"*The Cincinnati Southern Railway: A Study in Municipal Activity.*" Johns Hopkins University Studies. Pp. 96. Baltimore, 1894.

Dr. Westel W. Willoughby, has been appointed Reader in Political Science at Johns Hopkins University. Dr. Willoughby was born at Alexandria, Va., on July 20, 1867. After three years at the Washington (D. C.) High School, he entered, in 1885, Johns Hopkins University, where, for the three succeeding years, he held an honorary scholarship. In 1888 he received the B. A. degree, and in 1891 the degree of Ph. D.* from that university. The year 1890-91 he held a Fellowship in Politics. The year 1888-89 he was Principal of the Weightman Public School, at Washington, D. C. Since 1891 Dr. Willoughby has been practicing law at Washington. In addition to his appointment at Johns Hopkins, he has been elected Lecturer in Political Philosophy at Stanford University.

Dr. Willoughby is a member of the American Historical Association. He has written:

"*The Supreme Court of the United States: Its Administrative Importance in Our Constitutional System.*" Pp. 120. 1890.

"*The Government and Administration of the United States.*" (Co-author with W. F. Willoughby.) Pp. 152. 1891.

* See below p. 134.

† See ANNALS, vol. ii, p. 254, September, 1891.

"*The New School of Criminology.*" American Journal of Politics, May, 1893.

"*A National Department of Health.*" ANNALS Vol. IV., September, 1893.

At present he is engaged, along with W. F. Willoughby, in preparing several reports for the Bureau of Education.

Lake Forest University.—Dr. Adelbert Grant Fradenburgh has been appointed Instructor in Political Economy at Lake Forest University, Lake Forest, Ill. Dr. Fradenburgh was born September 15, 1867, at Point Peninsula, Jefferson County, Ill. After studying at the Titusville (Pa.) and Oil City (Pa.) high schools, he entered Allegheny College in 1886. In 1890 he graduated with the degree of B. A., and three years later received from the same college the degree of M. A. During 1891-92 he pursued university studies at Johns Hopkins, and during 1892-94 at the University of Wisconsin, receiving from the latter institution the degree of Ph. D. in June, 1894.* The year 1890-91 Dr. Fradenburgh was Professor of History and English at the Williamsport (Pa.) Dickinson Seminary. Dr. Fradenburgh is a member of the American Academy of Political and Social Science. He has been a frequent contributor to the *Outlook*, *Methodist Review*, *Christian Advocate*, the *Pittsburgh Chronicle-Telegraph* and *Bulletin*, *Chicago Tribune*, *Buffalo Express* and *Cincinnati Commercial*.

University of Nebraska.—Mr. William George Taylor, formerly Instructor in Political and Economic Science at the University of Nebraska, Lincoln, has been made Adjunct Professor in those subjects, and has been placed in charge of the Department of Political and Economic Sciences. Professor Taylor was born in New York City on May 13, 1859. He attended public and private schools in New York, and when he was eighteen entered Harvard University. In 1880 he graduated from Harvard with the degree of A. B. (*magna cum laude*). He studied law for one year at Columbia and two at Harvard, receiving, in 1883, from the latter institution the degree of LL. B. The following year he was admitted to the New York bar. In 1886 he went abroad and spent four years in study and travel. During 1887-88 he attended lectures at the *École des sciences politiques* and the *Collège de France*, in Paris, chiefly those of Leroy-Beaulieu. The two years following he studied at Leipzig, attending chiefly the lectures of Roscher, Brentano and Warschauer. During 1892-93 Professor Taylor studied at the University of Chicago under Professor Laughlin. Professor Taylor is a member of the American Historical Society and of the American Academy of Political and Social Science. Besides numerous contributions to newspapers, he has written:

* See below p. 135.

"*Bismarck as a Typical German.*" Proceedings of the American Historical Association. Vol. IV.

Olivet College.—Mr. Charles McKenny has been advanced from Instructor in History at Olivet College, Michigan, to that of Professor of History. Professor McKenny was born on September 5, 1860, at Dimondale, Eaton County, Mich. In his youth he attended the public schools of Eaton County. He entered Michigan Agricultural College and graduated in 1881 with the degree of B. S. From 1882 to 1887 he was principal of public schools at Charlotte and at Vermontville, Mich. He then entered Olivet College and received in 1889 the degree of A. B., and in 1892 the A. M. degree. Since 1889 he has been Instructor in English and History at Olivet College. Professor McKenny is a member of the Michigan Political Science Association.

University of Pennsylvania.—Dr. Emory R. Johnson* has been appointed Instructor in Transportation and Commerce at the University of Pennsylvania. He has recently published:

"*The Relation of Taxation to Monopolies.*" ANNALS, Vol. IV, May, 1894.

Dr. Leo S. Rowe has been appointed Lecturer upon Municipal Government in the Wharton School of Finance and Economy, University of Pennsylvania. Dr. Rowe was born at McGregor, Iowa, on September 17, 1871. He attended the Philadelphia public schools, graduating from the High School with the degree of A. B. in 1886. He then entered the University of Pennsylvania and received from that institution the degree of Ph. B. in 1890. From 1890 to 1892 he held a Wharton School Fellowship in Political Science.† He went abroad in 1890 and pursued university studies at Halle (1890), Paris (1890-91), Berlin (1891-92), Vienna (1892), and Rome (1893). In 1892 he received the degree of Ph. D. from the University of Halle. Dr. Rowe's work abroad was devoted chiefly to the subject of municipal government, and during the year 1893-94 he delivered a series of lectures upon that topic in the University of Pennsylvania. He is a member of the Staatswissenschaftliche Verein of Berlin and a *correspondant* of the Société d'Économie sociale and of the Société d'Anthropologie of Paris. He is also a member of the American Economic Association and a Councilor of the American Academy of Political and Social Science.

Dr. Rowe has written:

"*Instruction in Public Law and Economics in German Universities.*" ANNALS, Vol. I, July, 1890.

*See ANNALS, vol. iv, p. 462, November, 1893.

†See ANNALS, vol. i, p. 297, October, 1890.

"*Une école des sciences politiques aux Etats-Unis.*" *La Reforme Sociale*, 1891.

"*Instruction in French Universities.*" *ANNALS*, Vol. II, January, 1892.

"*Die Gemeinde finzen von Berlin und Paris.*" Jena, 1893. Pp. 236.

"*Miet und Gebäude preise in Frankreich.*" Conrad's Jahrbuch, 1893.

"*Annual Congress of the Society of Social Economy at Paris.*" *ANNALS*, Vol. IV, September, 1893.

"*Betterment Clause of the London Improvement Bill.*" *ANNALS*, Vol. IV, November, 1893.

"*City Government as it Should Be and May Become.*" Proceedings Conference for Good City Government, Philadelphia, 1894.

"*Reform in Municipal Government,*" Boston, 1894.

Articles, "*Municipality in Prussia*" and "*Municipality in Pennsylvania,*" in Palgrave's "Dictionary of Political Economy."

Dr. Henry Rogers Seager has been elected Instructor in Political Economy in the Wharton School of Finance and Economy, University of Pennsylvania. Dr. Seager was born in Lansing, Mich., July 21, 1870. He received his preliminary training in the Michigan Military Academy, and attended the University of Michigan from 1886 to 1890, taking the degree of Ph. B. in the latter year. He pursued advanced studies at Johns Hopkins (1890-91), Halle (1891-92), Berlin (1892) Vienna (1892-93), and Paris (1893), returning to the University of Pennsylvania for his final year, where he took the degree of Ph. D. in June, 1894. *

Dr. Seager is a member of the American Economic Association and of the Council of the American Academy of Political and Social Science, and has written:

"*German Universities and German Student Life.*" *Inlander*, 1892.

"*Economics at Berlin and Vienna.*" *Journal of Political Economy*, May, 1893.

"*Review of Philippovich's Grundriss der politischen-Oekonomie.*" *ANNALS*, Vol. IV., July, 1893.

"*The Pennsylvania Tax Conference.*" *ANNALS*, Vol. IV., March, 1894.

Trinity College.—Dr. John Spencer Bassett,† who last year was Professor of History, has been made Professor of History and Political Science at Trinity College, North Carolina. He received, in June, the

*See below p. 135

†See *ANNALS*, vol. iv, p. 462, November, 1894.

degree of Ph. D. from Johns Hopkins University.* He has written since the last list was published :

"*The Constitutional Beginnings of North Carolina.*" Johns Hopkins Studies, Twelfth Series, No. 3.

"*Relation of Rome to the Early Kentish Church.*" To-day, April, 1894.

"*The Naming of the Carolinas.*" Sewanee Review, May, 1894.

Mr. Jerome Dowd † has been made Professor of Economics and Mercantile Science. He has recently written :

"*Sanitary Suggestions for the South,*" Charlotte Observer, 1894.

Wheaton College.—Professor Elliott Whipple, † who was last year appointed to the chair of Social Science and Pedagogy at Wheaton College, Wheaton, Ill., has been made Professor of Political and Social Science at that institution.

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IN ACCORDANCE with our custom we give below a list of the students in political and social science and allied subjects on whom the degree of Doctor of Philosophy was conferred at the close of or during the last academic year. ‡

University of Chicago.—John Cummings, A. B., A. M. Thesis: *The Poor Law System of the United States.*

Columbia College.—Frederic René Coudert, Jr., A. B., A. M., LL. B. Thesis: *Marriage and Divorce in Europe.*

James A. McLean, A. B., A. M. Thesis: *Essays in the Financial History of Canada.*

Frederick A. Wood, A. B. Thesis: *Financial History of Vermont.*

Cornell University.—Thomas Nixon Carver, A. B. Thesis: *The Theory of Wages Adjusted to Recent Theories of Value.*

Thomas Wardlaw Taylor, Jr., A. B. Thesis: *The Individual and the State.*

Harriet Emily Tuell, A. B. Thesis: *The Work of the Monk in Early England.*

Ulysses Grant Weatherly, A. B. Thesis: *German Particularism in the Years 1813-15.*

Johns Hopkins University.—John Spencer Bassett, A. B. Thesis: *The Constitutional Beginnings of North Carolina (1663-1729).*

Jacob H. Hollander, A. B. Thesis: *The Cincinnati Southern Railway: A Study in Municipal Activity.*

* See below,

† See ANNALS, vol. iv, p. 463, November, 1893.

‡ See ANNALS, vol. i, p. 293, for academic year 1889-90; vol. ii, p. 253, for 1890-91; vol. iii, p. 241, for 1891-92; vol. iv, p. 312 and p. 466, for 1892-93.

Masanobu Ishizaka, Ph. B. Thesis: *Christianity in Japan, 1859-83*.
 Jesse Siddall Reeves, S. B. Thesis: *International Beginnings of the Congo Free State*.

University of Michigan.—Kennedy Brooks, A. B., A. M. Thesis: *A Sketch of the Financial History of Illinois*.

Charles Horton Cooley, A. B. Thesis: *A Theory of Transportation*.

John Patterson Davis, A. B., A. M. Thesis: *Corporations in the Seventeenth and Eighteenth Centuries*.

James Allen Smith, A. B., LL. B. Thesis: *The Multiple Money Standard*.

Ohio State University.—Lucy Adelaide Booth, A. B., A. M. Thesis: *The Poor Law of Ohio*.

University of Pennsylvania.—Herbert Friedenwald, A. B.

Harry Rogers Seager, Ph. B. Thesis: *The Public Finances of Pennsylvania; State and Local*.

University of Wisconsin.—Adelbert Grant Fradenburgh, A. B. Thesis: *The Petroleum Interest in the United States*.

Yale University.—Jean du Buy, J. U. D. Thesis: *Two Theories on the German Constitution*.

Sara Bulkley Rogers, A. M. Thesis: *The Rise of Civil Government and Federation in Early New England*.

Guy Van Gorder Thompson, B. A. Thesis: *The Draconian Constitution*.

FOR THE academic year 1894-95, appointments to fellowships and post-graduate scholarships have been made in our leading institutions as follows:

Bryn Mawr College.—*Fellowship in History*, Nellie Neilson, A. B.

University of Chicago.—*Armour-Crane Fellowship in Political Economy*, Robert P. Hoxie, Ph. B.; *Chicago Women Fellowship in Political Economy*, Sarah M. Hardy, Ph. B.; *Graduate Fellowship in History*, James W. Fertig, A. B., A. M.; *in Political Economy*, John W. Million, A. B., A. M.; *Graduate Scholarship in Political Economy*, Henry P. Willis, A. B.; *in Political Science*, Midori Komatz, LL. B., and Edmund S. Noyes, A. B.; *Honorary Fellowship in Political Science*, Helen H. Tunnicliff, A. B.; *Junior Fellowship in History*, George H. Alden, S. B., A. B., Regina K. Crandall, A. B., Walter S. Davis, A. B., A. M., and Cora L. Schofield, A. B.; *in Political Economy*, George C. Calvert, Ph. B., A. M., William F. Harding, A. B., and George Tunell, S. B.; *in Political Science*, Joel R. Mosley, S. B., S. M., and William C. Wilcox, A. B., A. M.; *Senior Fellowship in History*, James W. Thompson, A. B.; *in Political Economy*, Henry

W. Stuart, A. B.; in *Social Science*, William I. Thomas, A. B., A. M., Ph. D.

Columbia College.—*Seligman Fellowship in Economics*, George C. Sikes, A. M.; *Special University Fellowship in Political Science*, H. A. Vick, A. B.; *University Fellowship in Administration and Finance*, Charles W. Tooke, A. M.; in *Economics*, James W. Crook, A. M., and M. B. Hammond; in *History*, Lester G. Bugbee, A. M., Harry A. Cushing, A. M., and William R. Shepard, A. M.; in *Jurisprudence and Economics*, Isidor Loeb, A. M., LL. B.; in *Sociology and Political Economy*, John F. Crowell, A. M., and Arthur C. Hall, A. M.

Cornell University.—*Fellowship in American History*, Mortimer Alexander Federspiel, Ph. B.; in *Political Economy and Finance*, John Haynes, A. B., and Jesse Francis Orton, A. B.; *President White Fellowship of Political and Social Science*, Frank Spencer Edmonds, A. B.; *President White Traveling Fellowship of Modern History*, Arthur Charles Howland, A. B.

Harvard University.—*Ozias Goodwin Memorial Fellowship in Constitutional and International Law*, Amos Shartle Hershey, B. E., A. B.; *Henry Lee Memorial Fellowship in Political Economy*, Guy Stevens Callender, A. B., A. M.; *Robert Treat Paine Fellowship in Political Science*, Carlos Carleton Closson, A. B., A. M.; *Thayer Scholarship in History*, Samuel Bannister Harding, A. B., A. M.; in *Political Economy*, Howard Hamblett Cook, A. B., A. M.; *Gorham Thomas Scholarship in History*, James Sullivan, Jr., A. B.

Iowa State University.—*Fellow in Political Science*, Frank Henry Noble, A. M.

Johns Hopkins University.—*Fellowship in Economics*, Arthur Fisher Bentley, A. B.; in *History*, Thomas Francis Moran, A. B.; *Hopkins Honorary Scholars from Virginia and North Carolina*, J. C. Ballagh, S. R. Hendren, A. B., and E. W. Sikes, A. M.; *Hopkins Scholars from Virginia and North Carolina*, B. W. Arnold, Jr., A. B., J. A. C. Chandler, A. B., and L. N. Whealton, A. B.

University of Texas.—*Fellowship in History*, J. E. Pearce, A. B.

Washington and Lee University.—*Howard Houston Fellowship*, William Reynolds Vance, A. B., A. M.

University of Wisconsin.—*University Fellowships in History*, Orin Grant Libby, M. L., and Theodore Clarke Smith, A. M.; *University Scholarship in Economics*, Nellie Page Bates, A. B.; in *Social Science*, George Smith Wilson, B. L., and Henry Sherwood Yonker, B. S.

BOOK DEPARTMENT.

REVIEWS.

A Short Account of the Land Revenue and its Administration in British India. By B. H. BADEN-POWELL, one of the judges of the Chief Court of the Punjab. Pp. 254. Price \$1.50. Oxford: The Clarendon Press; New York: Macmillan & Co., 1894.

This is "an attempt to describe the Land Revenue Administration of British India, and the forms of land-holding on which that administration is based, in the compass of one small volume." The same author has published "Land Systems of British India; being a Manual of the Land Tenures and of the Systems of Land Revenue Administration, prevalent in the several provinces." *

Necessarily the author had to exclude details. But he did not fill it with generalizations. He has selected the most general conditions and the most important effects and presented them analytically.

American readers will look to this source for brief and comprehensive information on British management of Indian lands. The British government aims to be fair and equitable; to have a system rigid enough to command respect and elastic enough to relieve the exceptional cases of hardship.

For the economist there is little new matter. Economic rent, incidence of taxation, co-operative and other methods of making improvements are not discussed. Everywhere and always, except in years of famine, there is a surplus product from the soil over and above the needs of the cultivators, of which the State gets no inconsiderable part; and frequently there is some individual or juristic person who, as landlord, gets as much more. "The revenue is technically said to consist of a fraction (usually one-half) of the . . . total rents actually received" by the landlord; and of half the "net product" of the lands of cultivating proprietors.

It is the student of social institutions who will find the book richest in suggestions. The English have surveyed large tracts of the land. They have made thorough and scientific estimates of the "rent" and "net product" of it, parcel by parcel. And they have finally determined what persons hold estates in the land, not only that they may know from whom to collect their revenue, but also that they may

* 3 Vols., Clarendon Press, 1894.

protect each and every estate from this time forth. All this is matter of permanent record, and changes are carefully recorded as they occur.

In the process of finding out all the estates resting on the land, of whatever kind and degree, and of determining who were the equitable owners, the history of many of them was thoroughly worked out. It appears that changes have been more violent than they can ever be again. The fortunes of war and peace have reduced independent chieftains to the grade of under-lords, or cultivating tenants, or possibly lower; and the same fortunes have raised undistinguished families to commanding positions. The money lender, the revenue farmer and the colonizer were of those who, having somewhat, could use it to acquire more. But so long as British administrators are discreet in executing the principles laid down, changeless and monotonous peace will reign. The landlord has now been guaranteed his determined and recorded rights; and the tenant has been guaranteed his.

Under the native rulers the changing conditions exemplified the principle of equality and the principle of inequality both at once. The descendants of conquerors, chieftains and colonizers were equal among themselves and had dependents in various degrees of subordination under them. The antithetical principles of change and conservation were coexistent. The energetic and powerful were increasing their power, and the rules forbidding the members of a ruling caste to become cultivators, which could not defend them from the successful aggressions of a stronger tribe, only served to make their condition in the reduced estate most hard. However, the force of custom in the hands of the natives is undoubtedly far weaker than the force of law in the hands of the English to conserve whatever was found that is fair and equitable.

No one estate in land seems to have claims to be called primary and original to the exclusion of all others; least of all has the estate of a group of communistic cultivators a right to this claim. From the days when the laws of Manu were in the process of codification society was recognizing as just and equitable the claims of various non-cultivators to a share in the product. This does not imply either that justice is absolute or that rent is just. No one ought to infer its justice from its antiquity. Simply this: it is now matter of record that the East Indians, Aryan and non-Aryan, accepted it without protest.

The book is, after all, a hard one to read. The style is not always unexceptionable. There is much that is of interest only to the candidate for the Indian Civil Service, who may use it as a textbook. The

heavy faced titles prefixed to each paragraph will guide the reader however. They are of more assistance than the index in looking up references to any particular subject. Americans will find the book valuable in spite of the dross.

FREDERICK W. MOORE.

Les Ministres dans les principaux pays d'Europe et d'Amérique.

Par L. DUPRIEZ. 2 vols. Pp. xix, 548 and viii, 544. Price, 20 francs. Paris : Rothschild, 1892, 1893.

Students of government will welcome this as the first exhaustive and satisfactory study of cabinets, embracing the latest and most scholarly investigations. Since it came out, one or two other works have appeared on the same subject, possessing some points of advantage in the way of handy reference, but not to be compared with this in learning and in the deeper treatment of the topic.

In the first volume the author takes up the rôle of ministers in constitutional monarchies, England, Belgium, Italy, Prussia, and the German Empire. Under each country the order of treatment is, first, the ministers and the constitution,—the sources of the constitution, the constitutional powers, the origin, composition, formation and general position of the cabinet ; second, the ministers and the king ; third, the ministers and parliament,—the organization and powers of the chambers, political parties, the part played by ministers in the preparation of laws and in financial legislation, and the control of ministers by parliament ; fourth, the ministers and administration,—local institutions, parliamentary control, and the functions of the individual ministers. The second volume treats of republics, the United States of America, Switzerland, and France. The scheme followed is essentially the same as in the first volume, with such modifications as the absence of royalty necessitates.

These two beautiful and learned volumes invite one at many places to approval and commendation ; but for special reasons the reviewer wishes to devote his limited space to a consideration of a portion of the second volume, the part allotted to France. In the ANNALS, as well as in other publications, there has of late been considerable discussion of cabinet government, with particular reference to its application to the United States. As it happens, nearly all writers, whichever side they take on the question, appeal almost solely to English experience alone. On many grounds this is largely justifiable ; England is the birthplace and home of cabinet government, and there it has had its normal development ; our own institutions are to a large extent virtually English ; our government, however much the outward

form lacks resemblance, is at bottom English; our laws, our political philosophy, our language, our religion, our habits of thought, are all English. On these and other accounts it is well to dwell upon the history and theory of the English cabinet, when considering the subject in relation to its possible application, pure or modified, to the United States. But while all this is true, one would also do well to make a detailed study of the transplanted institution, and no country affords so good a field for this as does France. Here, however, one must bear in mind how much France differs from England in race and in political and legal institutions; but making the allowance thus needed, the Third French Republic offers an instructive field of investigation. French experience is, to be sure, occasionally referred to by writers, though usually no more than to the extent of calling attention to the fact that in France there have been thirty-odd changes in ministry in less than twenty-five years, together with such deductions as vigorous English may draw from the mere knowledge of this one fact.

From M. Dupriez one may learn—to select a few out of many things—that changes of ministry in France are often changes in name rather than in fact; it frequently happens that more than one-half of the members of the new cabinet were also members of the old, and sometimes it is hardly more of a “crisis” than was involved in the recent transfer of leadership in England from Gladstone to Rosebery. Again, since December, 1877, there has not been a single change of government in the English sense; during the last seventeen years in France the Republican party alone, or, more accurately, one or another group or combination of groups of Republicans, has held uninterrupted control; in the French chambers there is not an organized opposition, ready to take up the reins of government when they are laid down by a defeated cabinet; the new ministry represents, as a rule, the same groups as the old,—it is a shuffling of names and, nowadays at least, never a change of parties; closely connected with this, too, is the fact that, on many questions, responsibility is individual and not collective. Again, the French Senate, though far less powerful than the American, is by no means so impotent as the English House of Lords, and accordingly modifies somewhat the ordinary workings of cabinet government. Finally, the French form of parliamentary government has another peculiarity, in that it has been used as a weapon to force the resignation of the President of the Republic; Thiers, MacMahon and Grévy were all driven from power by means of the control possessed by the chambers over the cabinet, and already there are covert threats that, in certain contingencies, Casimir Périer may similarly be deprived of his office. The dissolution of Parliament, one of the apparently necessary features of cabinet government, has

been resorted to in France but once, and its abuse at that time has rendered subsequent prime ministers and presidents loath to repeat the process; and yet its employment on certain occasions would seem to have been the one thing needed to bring order out of political chaos.

Special attention is called to France, because few of our writers seem to be intimately acquainted with the workings of cabinet government in the most prominent land of its adoption. But the position and powers of ministers in other countries, both where cabinet government does as well as where it does not prevail, are also treated by M. Dupriez in a most luminous and instructive manner, and no one can err in making a careful study of his very valuable treatise.

CHARLES F. A. CURRIER.

The Discovery of America, with some account of Ancient America and the Spanish Conquest. By JOHN FISKE. 2 vols. Pp. 516 and 631. Price, \$4.00. Boston: Houghton, Mifflin & Co., 1893.

Surely Mr. John Fiske has the pen of a ready writer, yet even he finds the writing of a narrative history of the United States a work requiring many years. Meantime he does not propose to allow his accumulating manuscript to grow musty. From time to time he has given us a finished chapter as an earnest of the coming series. The initial volumes make their timely appearance in the year filled with Columbian reminiscence.

The book has two themes, different in character, and yet each indispensable to a clear understanding of the other. The first and subsidiary theme is the study of ancient America. Here Mr. Fiske supplements the skill and accuracy of the historian with the training and enthusiasm of the anthropologist. The perplexity which the early European explorers felt when first brought into contact with the American aborigines—a perplexity shared by our earlier historians—disappears only when comparative anthropology makes possible the placing of the primitive American peoples in their proper stage in the evolution of human society. In Europe the development had been comparatively steady and continuous; there had been no startling "breaks." But when Columbus set foot upon America he stood face to face with man of the stone age, with man in a grade of culture which in Europe had passed away before the founding of Rome.

The value of Mr. Fiske's graphic yet painstaking delineation of ancient America is clearly seen in the later chapters, which treat of the Spanish conquests of Mexico and Peru. The Spaniards, perplexed by the strange contrasts between themselves and the peoples with whom they were struggling, could not help reading into primitive institutions the spirit and character of the institutions with which

the Europe of the sixteenth century was familiar. The work of the earlier historians, who accepted as authentic these Spanish observations, now comes up for an interesting overhauling and reconstruction at the hands of the anthropologist-historian. Montezuma, who used to figure as a mighty potentate, the head of a great feudalized "empire," is now seen to be a priest-commander of the type of the primitive Greek *basileus*. His vast "empire" becomes a loose confederacy, under the rule of the typical Tribal Council, with which Sir Henry Maine has made us familiar. The roseate hues in which the earlier historians painted the civilizations of Mexico and Peru fade somewhat in the light of recent research. "In America," says Dr. Draper, "Spain destroyed races more civilized than herself," and he did not hesitate to assert: "At the time of the conquest the moral man in Peru was superior to the European, and I will add the intellectual man also." Mr. Fiske, on the other hand, insists that "if we are to use language at all correctly when we speak of the 'civilizations' of Mexico and Peru, we really mean civilizations of an extremely archaic type, considerably more archaic than that of Egypt in the time of the Pharaohs." "A 'civilization' like that of the Aztecs, without domestic animals or iron tools, with trade still in the primitive stage of barter, with human sacrifices and with cannibalism, has certainly some of the most vivid features of barbarism." The cavalier thesis has recently been put forward that the discovery of the new coasts by Columbus was an unspeakable misfortune because it led to the introduction of the horrors of the inquisition into the Spanish conquests. Mr. Fiske maintains, on the contrary, that the coming of the Spaniards was a great good, even for Mexico, where they introduced a far better state of society than they found.

But the study of ancient America and of the Spanish conquests is not allowed to obscure the principal theme, the Discovery of America. All possible emphasis is laid upon one fact: the discovery of America was not one single event, it was rather a long and painful process extending through two and one-half centuries. Mr. Fiske seeks not merely to tell the familiar story of one or two eventful voyages, but rather to portray the gradual unfolding of a new world before the consciousness of Europe. Of the pre-Columbian expeditions that of the Northmen is the most interesting. Mr. Fiske reaches the conclusion that the Saga of Eric the Red should be accepted as history, since it tells a straightforward story bearing the earmarks of a truthful record of events which show a knowledge of things which could have become known to mediæval Europe only as a result of actual visits to the North American coast south of Labrador. But that Leif's colony flourished for several centuries and carried on a thriving trade with

Europe, that its memory was clearly perpetuated in Ireland, and that there Columbus obtained the information which led him to undertake his voyage—all this theory of modern enthusiasts who put forward the claim of the Northmen as the true "discoverers" of America Mr. Fiske considers utterly groundless. Not an authentic relic of the Northmen has ever been discovered south of Labrador. "Except for Greenland, which was supposed to be a part of the European world, America remained as much undiscovered after the eleventh century as before it. In the mid-summer of 1492 it needed to be discovered as much as if Leif Ericsson or the whole race of Northmen had never existed."

The great work of Columbus and of the voyagers who followed him remains the central feature of the book, and is brought into clearer relief by reason of the carefully prepared background. The training of Columbus for his career, the many discouragements, the difficulties and dangers of the voyages are all skillfully placed before the reader. It is here that this history comes most sharply into comparison with the other great book of the Columbian anniversary, Mr. Winsor's "Christopher Columbus." Both historians have used substantially the same sources, both have told the story of how the great navigator "received and imparted the spirit of discovery;" on most points they are in practical agreement. But the impressions of the character of Columbus which these two scholars have gained from a study of the same facts, differ most widely. Mr. Winsor has been painstaking in his enumeration of facts, everything that can throw light upon the character of Columbus is recorded and its value weighed. We are shown a defect here, a virtue there, and are led up to the conclusion that on the whole the defects far outweigh the virtues. And yet we feel that nowhere have we seen the man Columbus himself. To research hardly less painstaking, Mr. Fiske has added *insight*. The defects in the great discoverer's character are by no means glossed over, neither are they forced into prominence by being isolated. Mr. Fiske brings to his characterization the skill of a psychologist. He understands men, and men of different characters. He makes us see in Columbus, in Magellan and in Las Casas men of individuality, not mere bundles of virtues and defects. He realizes that it was a "complex tangle of notions that actuated the mediæval Spaniard." Back into the very midst of that tangle he puts the reader and lets him watch Columbus in the thick of the fight.

Under the title "Mundus Novus," Mr. Fiske presents in graphic outline the series of voyages of Cabot, Vesputius, Magellan and the other great explorers, which proved that a new world had indeed been discovered. The 150 pages devoted to Vesputius comprise some of the

author's most critical work. Indeed, the particularity with which the subject is treated may seem better suited to a monograph than to a chapter in so general a discussion. Mr. Fiske justifies his course, however, by urging that through this long analytical discussion of the way in which the name America came to be applied to the whole western continent, better than by any mere narrative, are we made to realize how gradual a growth the discovery of America proved.

The beautiful character of *Las Casas* arouses the historian to unwonted enthusiasm. He passionately defends his hero from the charge of having founded negro slavery in the new world, even asserting that in *Las Casas* we may see "the mightiest and most effective antagonist of human slavery in all its forms that has ever lived." Few chapters in history are more thrilling than that which describes how the terrible "Land of War" was civilized and Christianized through the consecrated efforts of this white-souled monk. "The memory of such a life," says Mr. Fiske, "must be cherished by mankind as one of its most precious and sacred possessions."

It goes without saying that a book of this nature from the pen of Mr. Fiske bears evidence of abundant research. Materials have been used at first hand. If the reader is disposed to test the author's accuracy of statement or validity of inference, ample opportunity is afforded by the full citations of authorities in the foot-notes. But many of the foot-notes have not been reserved for this dignified use; they show a flippancy, a resort to ridicule and sarcasm which seem strangely out of place in so scholarly a work. Of course this book is written in Mr. Fiske's captivating style; some passages are nobly eloquent. The book is carefully indexed, and the student is grateful for an excellent topical analysis. One of its greatest services consists in its freeing the reader "from the bondage to the modern map." At each stage in the narrative is shown the contemporary map or globe. Maps like those of Ptolemy and Toscanelli not merely recorded the discoveries, they inspired them. The evolution of the modern map, as traced in these reproductions of ancient charts, illustrates most graphically the slowness with which there dawned upon Europe the knowledge of the American continent. GEORGE H. HAYNES.

Industrial Arbitration and Conciliation. Some chapters from the industrial history of the past thirty years. Compiled by JOSEPHINE SHAW LOWELL. Pp. 110. Price, 40 cents. Questions of the Day Series. New York and London: G. P. Putnam's Sons, 1893.

Any work bearing Mrs. Lowell's name is sure to be filled with the spirit of reform. Her standpoint in respect to the labor question is

shown in the opening paragraphs of the present book, where she says:

"It is in the nature of things that men should unite to attain their common ends, and the kind of union they form, the ends which they seek, and the means adopted to attain those ends, are matters of vital importance both to themselves and to the public. There can be little doubt that these points are all far more dependent than is generally recognized, not upon the men who form the unions, but upon the reaction upon them of the laws under which they live, and of the attitude of their employers and of the public toward them."

Then follows an extended extract from "The Conflicts of Labor and Capital," by George Howell, giving a sketch of the gradual emancipation of the English labor unions from the oppressive laws which prevailed at the beginning of the present century. The lesson drawn is that repressive laws are ineffectual, dangerous and demoralizing. Membership in a union should be purely voluntary. "Neither the employer nor the workman has the right to fetter the free action of any other person in this matter."

This serves as an introduction to the main subject of the book—industrial conciliation. The foundation for confidence in boards of conciliation as a means for promoting industrial peace lies in the fact that strikes are usually the outcome of misunderstandings. As a rule, the employer and workman associate so little that they have but slight regard for each other's interests, and but slight knowledge of the difficulties with which the other party must contend; but when both parties are thoroughly organized a standing board of conciliation composed of trusted representatives of both masters and workmen offers the desired means for reaching a mutual understanding, and for inspiring mutual confidence. The remarkable success of the efforts described in Mrs. Lowell's book makes them worthy of the attention of all who are interested in the labor problem, and the scope of the book, as well as its brevity, commends it to the busy public.

Some well chosen extracts from Henry Crompton's "Industrial Conciliation" give an epitome of the development of boards of conciliation in England from 1860 to 1876, and the history is brought down to 1890 by extracts from a review article by Robert Spence Watson. "Conciliation in Belgium" is presented chiefly by translation from the writings of Mr. Julien Weiler, through whose efforts the system was adopted in the colliery of Bascoup in 1876.

In the United States the principle of industrial conciliation has been adopted with excellent results in the mason builders' trade of New York, Chicago and Boston, through what are known as joint committees of arbitration. The joint committee consists of five representatives

from the labor union and five from the mason builders' association. These ten members choose some disinterested and respected party as an umpire to be called upon in case the regular committee fails to reach an agreement. Both parties agree to abide by the findings of this committee on all matters of mutual concern referred to it by either party.

This simple plan for the mutual consideration of questions of common interest has proved entirely successful in avoiding strikes and lockouts. It has even been very rarely, if ever, necessary to call for the help of the umpire in settling disputes. The actual working of these committees is well presented with interesting extracts from their records and rules.

On learning of the success of this plan, which was inaugurated in New York nearly ten years ago, one naturally wonders why it has not been adopted by every trade that suffers from industrial warfare. The explanation undoubtedly lies in the fact that employers are loth to give up the idea that they have a right to manage their business as they see fit, while the fundamental principle of industrial conciliation is joint consideration and joint action on all matters of mutual concern. That the employer must eventually yield his point is indicated by the ever increasing solidarity of economic interests. When economic theory has established the true principle for the determination of just wages, these joint committees of arbitration seem likely to become the means for inaugurating industrial peace.

DAVID I. GREEN.

Les Bourses du Travail. By G. DE MOLINARI. Pp. 335. Price, 3 fr. 50. Paris: Guillaumin & Cie, 1893.

No one questions the immense material advance of modern times, and few are disposed to doubt the possible beneficence of this great increase in man's power over the forces of nature. But a question has arisen concerning the distribution of this extraordinary addition to our wealth. This is the labor problem: Have the means of good living accruing to mankind been equitably distributed between the two great categories of producers who have contributed to their creation? Do laborers get a fair share of the product which results from the joint efforts of the necessary factors in production, labor and capital? How can the division be made or be made to seem more just?

Various solutions are offered to the problem. Christian philanthropists urge the rule of life given by Christ to a group of fishermen, and insist that doing unto others as we would that they should do unto us

will alone give us social and industrial peace. Henry George regards the wages system as a modified form of slavery, and maintains that the wedge which has entered society and is making the rich richer and the poor poorer can only be removed by a confiscation of all landed property and by keeping the same as the property of all of us—that is, of the State. Socialists go a step farther and hold all profit to be surplus value and hence only robbery of laborers. They would confiscate all the means of production and then use them under some system of public industry where all work for each and each for all.

The answer which the editor of the *Journal des Economistes*, M. de Molinari, gives to the question is at once affirmative and negative. He holds that wages to-day constitute more nearly than formerly a just proportion of the product of industry, but that they will continue to absorb a larger and larger portion; that this further increase will come as every past acquisition has come, from the remedies adopted by the laborers themselves and not through intervention on the part of the State; and that a higher social level is to be attained only by modifying and perfecting the institutions under which we are now living. He is an economic evolutionist and writes in the fear of the possible consequences of socialism.

In the work of such men as Owen, St. Simon and Fourier there was only the romantic chimera of attempting to replace the present order by a complete social reorganization. These social dreamers only influenced the more cultivated classes and led the finer minds to a Brook Farm—Albert Brisbane, George Ripley, George William Curtis, Emerson, Hawthorne, Charles A. Dana, and Margaret Fuller. But after 1848 socialists became politicians and proposed the expropriation of the capitalist class by a violent social revolution. M. de Molinari conceives that socialism has become epidemic, that repressive measures do not suffice, and that there is cause for alarm, particularly because governments are trying the homeopathic remedy of opposing revolutionary socialism with socialism of the State and this more than anywhere else in the most democratic of all countries, the United States. He thinks it not at all improbable that the first part of the socialist program will be realized in the near future. The political revolutions of the eighteenth and nineteenth centuries have made possible the social revolution of the twentieth. He therefore presents an economic philosophy, shows the impossibility alike of a personal relation between employer and employed and of the public direction of industry, and urges the conscious evolution of society through the perfection of the wages system.

His theory of wages is that the price of labor like that of everything else which is bought and sold is determined by cost; that there is a

necessary rate of remuneration of labor which represents the expenses of producing labor—the cost of living of laborers; that this is the just return for their service in industry; that this is a level toward which wages must gravitate, and that the chief obstacles to reaching and raising this are the secrecy which both laborers and their employers persist in maintaining in regard to the rate of wages actually paid, ignorance as to the real condition of the labor market, its limited extent, and the pressing necessity and retail methods of the laborer as seller on the same. He consequently believes that the remedy lies in widening the labor market, securing publicity, and using wholesale methods. Higher wages and greater security of income and regularity of employment would result. It would be but extending to labor the process of evolution which has already reached capital and the production of many staple articles such as cotton, wool, iron, the cereals, and so forth. The market is the world; the price is definite and not arbitrary; the supply is assured. He urges the establishment of boards of trade and stock exchanges in which labor shall be the article dealt in, and asks: "Why should not our daily papers give tables of the rates of wages as well as the price of stocks?" The larger half of his book is taken up with an historical account of the attempts to found these *bourses du travail* in France. It is a subject which has engaged the attention of our bureaus of labor, and the work in an English dress would commend itself to the commissioners and to leaders of labor movements.

The author contends that the extension and unification of the labor market will bring peace where now there is war, will make the price of labor impersonal as is that of capital already, will make possible wholesale methods, substitute publicity for secrecy, secure collective instead of individual guarantee against industrial change and accident, make higher wages possible by their being determined in a general and not in an isolated and local market, add to the wealth of the community, and increase the solidarity of mankind. A few more facts in the text itself and a little less anxiety about the freedom of international trade would make the book more interesting to American readers.

ARTHUR BURNHAM WOODFORD.

Leonidas Polk, Bishop and General. By WILLIAM M. POLK, M. D., LL. D. 2 vols., x, 349 and viii, 442. Price \$4.00. New York: Longmans, Green & Co., 1893.

The family of Pollock, under which form the name Polk first appears, is of Scotch origin, and besides Bishop Polk, has given to the

United States Governor Charles Polk, of Delaware, Trusten Polk, Governor of Missouri, and United States Senator, and President James K. Polk. From Maryland the family removed to Pennsylvania, and from this province, Thomas Polk, the grandfather of the Bishop, removed to Mecklenburg County, N. C., in 1753.

It was through the influence of Thomas Polk that the Assembly of North Carolina chartered in 1771 Queen's Museum, located in Charlotte, and destined to serve as a sort of high school and college for the Scotch-Irish Presbyterian element by whom the section was principally settled. But the charter was annulled by the king. The Schism Act was enforced in North Carolina from 1730 to 1773. The charter was withheld from the Newbern Academy in 1766 because the headmaster was not required to be of the Church of England, the Edenton Academy had the same fortune in 1768 and Queen's Museum, to escape a similar fortune, provided that the president should be an Episcopalian. But the Board of Trade saw through the arrangement, the fellows and tutors would still be Presbyterians, a charter would lend "encouragement to dissent," and was therefore not given. But Thomas Polk had the pleasure of seeing the institution flourish in spite of royal prohibitions, and it was instrumental in preparing the minds of the people of Mecklenburg for the stirring scenes enacted there in May, 1775. In their efforts for independence, no people were in advance of those of Mecklenburg, and perhaps their defeat in the matter of Queen's Museum acted as a spur to bolder deeds.

Thomas Polk was one of the leading actors in the Mecklenburg Declaration of Independence of the twentieth of May, so called, and also in that of the thirty-first of May. On the disputed matter of dates, Dr. Polk does not undertake to enter in detail. Such would have been impossible, for no phase of the history of North Carolina has been so widely discussed, or has such an extensive literature. He follows largely the strong address on the affirmative side by the Hon. William A. Graham, but does not seem to be well acquainted with the arguments on the negative side of the question.

Bishop Polk was intended by his father for the army. His own feelings led him into the church. Perhaps there are no more interesting sections in the book than those relating to his work as Missionary Bishop of the Southwest. This post he occupied from 1838 to 1841. His work embraced Arkansas, Indian Territory, Mississippi, Louisiana and Alabama. In many places he found that religion was hardly thought of; in others the church was unorganized, and much time was spent in organization. He was transferred to the Diocese of Louisiana in 1841. Here was the scene of his life work. There were then but two church buildings and five clergymen in the State. In 1860 he

had seen the clergy increase seven-fold, the members ten-fold and parishes and missions twenty-fold. When entering upon his Episcopate he became a planter and took the negroes coming to his wife by inheritance, rather than money, under the deliberate conviction that, as a planter, he could exercise a greater influence among a society of planters. But he never failed to recognize that his mission was as much to the slave as to his master, as his action in building St. John's Church for his own negroes while living in Tennessee will sufficiently indicate. Perhaps no more typical description of the patriarchal character of the ante-bellum Southern planter can be found than those chapters describing his home life and his tender relations to his family and slaves, and, in the absence of an extensive literature dealing with the private life of the old-time Southerner of the better class, the present volumes are particularly welcome.

Bishop Polk's greatest influence on posterity will be through the University of the South. In the organization of this institution his influence was paramount. The plans and outlines of the institution had been revolved in his mind for more than twenty years. It was to be, as its name indicates, an institution which should embrace all creeds and all States in the South, one whose curriculum and advantages should equal those of Yale and Harvard and its "University Press" was to serve as a source of encouragement and vehicle of expression for Southern literature. To show the broad basis, the large mould into which his ideas were cast compared with other institutions in the South, his purpose was that work should not be begun before it had an endowment of \$500,000, and this sum had been actually raised when the war swept it away. These plans, laid deep and well, met with hearty approval from churchmen and others. Governor Swain, President of the University of North Carolina, then perhaps the leading institution in the Southern States, and with which the new one would come into sharp competition, stated frankly that if any denomination could bring the various sects of Christians together on a common educational basis that church was the Protestant Episcopal.

The turning point in the life of Bishop Polk was in 1861. The year 1860 was spent in developing the plans of his University, and not in plotting against the Union as his enemies have said. But reared in the school of States' rights, it was natural for him to hold to Southern views. He had perfect faith in the validity of an ordinance of secession; in his opinion on the withdrawal of a State from the Union the church went with it, and he took action accordingly. He consented to serve in the Confederate army only in answer to what he believed to be the call of necessity. He did not resign his bishopric. His episcopal functions were only suspended and it was his constant desire

to lay aside the sword. But that time never came. He was commissioned Major-General twenty-fifth of June, 1861, was promoted Lieutenant-General in 1862, was in most of the battles in the West and was killed by a cannon shot on Pine Mountain, Georgia, on the fourteenth of June, 1864, while covering the retreat of Johnston before Sherman.

The second volume, with two chapters of the first, is devoted to secession and Bishop Polk's career as a general. It was, perhaps, undesirable that so much space was given to the military career of General Polk at the expense of the ecclesiastical career of Bishop Polk. His military work has gone; his episcopal and educational work remain.

Some errors have crept into the volumes. George Burrington's complaint of the North Carolinians (I, 8,) was made in 1731, not 1751; George E. Badger (I, 47,) was never a member of the Supreme Court of North Carolina. He was a judge of the Superior Court and was once nominated as a justice of the Supreme Court of the United States, but failed of confirmation. There was a newspaper in Hillsborough, N. C., in 1786 (I, 9), another in Salisbury in 1798, and one in Lincolnton about 1800. Prior to 1820 several others were probably published west of Raleigh. Cooper for Hooper (I, 44) has been corrected in the index, and as John Adams always spelt the name of Joseph Hewes correctly in other places he probably did so here. Raynor is for Rayner (I, 157, 175, 220). Governor Martin's letter (I, 10) is dated June 30, 1775, and not July 30, and Dr. Charles Caldwell's "Memoirs of General Greene" (I, 42), was published in 1819, not 1812.

The carefully prepared and exhaustive index of sixty-six pages is to be thoroughly commended. No better example to Southern book-makers can be offered than this, for to most of them this is a lost art. There is a portrait of Colonel William Polk, one of Leonidas Polk as Bishop and another as General, with numerous plans of battles. If the bibliography of American historical literature were closely examined it would appear that little, comparatively speaking, had been printed relating to Southern men; the South has been too indifferent, too serenely unconscious to care for the preservation of the record which it has made. Under such circumstances the life of Bishop Polk is of more than usual interest and value.

STEPHEN B. WEEKS.

RECENT BOOKS ON MONETARY PROBLEMS.

1. *A Treatise on Money and Essays on Monetary Problems.* Professor J. SHIELD NICHOLSON. Second edition, revised and enlarged. Pp. xvi and 415. Price \$2.50. London: Adam and Charles Black, New York: Macmillan & Co. 1893.

2. *Die Stichworte der Silberleute.* Von LUDWIG BAMBERGER. Vierte verbesserte und vermehrte Auflage. Pp. 151. Berlin: Rosenbaum und Hart, 1893.
3. *Le métal-argent à la fin du xix^e siècle,* Par LOUIS BAMBERGER. Traduit par RAPHAËL GEORGES LEVY. Pp. xiii, 352. Price 8 fr. Paris: Guillaumin et Cie, 1894.
4. *Mélanges financiers.* Par RAPHAËL GEORGES LEVY. Pp. 313. Paris: Hachette et Cie, 1894. Price 3 fr. 50.
5. *Die Währungsfrage und die Zukunft der Österreichisch-Ungarischen Valutereform.* Von F. WIESER. Pp. 28. Prag, 1894.
6. *Ist eine Abnahme der Goldproduktion zu befürchten?* Eine Vorfrage zur Währungsfrage. Von GEORG HEIM. Pp. 68. Price 2 mark. Berlin: L. Simion, 1893.

Monetary literature is so fruitful a branch of general economic literature, and especially in recent years has so much attention been concentrated on the study of money that for others than specialists a judicious spirit of selection is necessary in order to keep abreast of the current and to know those works that are really worth the knowing. All the books above cited are from able and representative men who are competent to speak with authority from the point of view they respectively present.

Professor Nicholson reproduces, in a new and altered edition, a volume that he originally published in 1888. It is a clear and well-written statement of the opinions that go to make up the scientific international bimetallic faith which has certainly been gaining many adherents of late. The form of the book is open to objection. The first part is an elementary treatise of 106 pages on money in general and seems to me too elementary for those readers who can intelligently read the second part, which makes up the bulk of the volume and is a series of essays, more or less abstruse, on various problems of monetary science, and much too difficult for the general reader of the industrial classes for whom the first part was originally written. The book may prove useful for class work to some teachers who do not care to use larger works, such as Walker's, but who might very profitably place Professor Nicholson's book in the hands of those following an elementary course on money, supplementing in lectures the clear statement of principles and using the essays later on as a basis for class discussions. These essays, Professor Nicholson tells us, are intended to be an application of the principles discussed in the first part to "some actual problems, especially those embraced in what is called the silver question." It is here, too, that most change has taken place in the new edition, and that chiefly by way of addition of

six new essays. A note of these may be of interest to those who possess the first edition and do not care to purchase the second. They are: (1) "Mr. Giffen's Attack on Bimetallists," reprinted from the *Nineteenth Century*, December, 1889. (2) "Mr. A. de Rothschild's Proposal to the Monetary Conference," from the *Scotsman*, December 3, 1892. (3) "The Missing Link Between Gold and Silver," also from the *Scotsman*, April 15, 1893. (4) "Living Capital of the United Kingdom," *Economic Journal*, March, 1891. (5) "Capital and Labour, Their Relative Strength," *Economic Journal*, September, 1892. (6) "The Indian Currency Experiment," *Contemporary Review*, September, 1893.

Space will not permit us here to discuss critically the opinions of Professor Nicholson especially, as these have undergone no radical change since the publication of his first edition. Both his power as an economic reasoner and the strength of his position are better illustrated in his essays than in the treatise. He well remarks that it is no longer possible to divide money theorists into mono-metallists and bimetallicists, since of each of these classes there exist many varieties. There is, however, one clear and final test which serves as a dividing line, no matter how many subdivisions it may later be necessary to make. That test is the affirmation or negation of the possibility of maintaining a fixed ratio between two metals irrespective of the economic conditions of their production and consumption. This says nothing about what ratio could be maintained or what amount of government power or concerted action would be necessary to maintain a fixed ratio. Yet whoever says that under no conditions is a fixed ratio possible, except when by accident it agrees with the market ratio, is some kind of a mono-metallist and he who says that it is possible is some kind of a bimetallicist. It then follows that each party must give his reasons for the faith that is within him. No amount of discussion of the monetary evils of which both sides are cognizant, whether professedly or not, nor general talk on the morality of bimetallicism will suffice to clear the already too hazy atmosphere so long as this vital question is neglected. Professor Nicholson devotes one of his shortest essays to this question and seems to prefer to make the quantitative theory of money the test of bimetallic orthodoxy. Undoubtedly the quantitative theory in its relation to prices is another vantage-ground from which to give and take battle, but it may be held with so many different restrictions as to be accepted by both mono-metallists and bimetallicists. We should like to see bimetallicists of Professor Nicholson's calibre devote more discussion to the vital point of the possibility of a fixed ratio. Among minor points we may mention the fact that the two essays on "Living Capital" and

"Capital and Labour," which attempt to estimate the capitalized value of the individuals who compose the population of England and to compare this with accumulated capital from the point of view of the labor struggle, seem rather out of place in a collection of purely monetary essays, their problems having little connection with those of monetary science. Moreover, the uncertain basis upon which such statistical estimates are made detracts much from any conclusions that may be drawn. The essay on "John Law of Lauriston" will again be welcomed by all students who wish to study a remarkable period in monetary history. It is thoroughly well done and will help to "brush away some of the dust of oblivion and the mire of calumny from the name of a man who in power and determination and sheer ability was one of the strongest men that Scotland has produced." In attempting to clear up the use of the term "appreciation of gold," Professor Nicholson tells us on page 54, that since appreciation means that gold coin will purchase more commodities or conversely, that commodities will bring fewer pieces of gold, therefore, "it is unmeaning to speak of the general fall in prices being caused by the appreciation of gold." In other words appreciation of gold and fall in prices are, according to Professor Nicholson, one and the same thing. Unless Professor Nicholson wishes to go into a metaphysical discussion of the "causal relation" and enlighten us with some new principle his point here is not well taken. The usage which he condemns has not only the weight of good authority in its favor, but it expresses, as well as words ever do, the thought intended. Mr. Goschen on Feb. 28, 1893, in speaking on the monetary question in the House of Commons, said that the lowering of prices was caused by an appreciation of gold. A gold appreciation or a fall of prices are two expressions which may be used to convey the idea that there has been a change in the relation of prices to the standard in which they are measured. Now it is true that this change may be due to two causes, both to changes in the standard and to other changes affecting the prices of commodities, in which case it would be inexact to say that gold appreciated because prices fell or *vice versa*, but as soon as we say the fall in prices has been caused by an appreciation of gold we mean that the change in relation has been due to changes in gold. It is like two ends of a see-saw, when one end goes up the other must go down, but when we say that end A went down because end B went up we mean that some change in the weight on end B took place which caused the movement. No one is deceived by this usage of terms and we see no clearer way of expressing the given idea.

Herr Bamberger, as a member of the German Reichstag, is so well known by his speeches and writings on money topics as to need no

introduction. The present little book has, moreover, met with astonishing success, as not every money treatise passes through four editions in so short a space of time, and we are told that a fifth, and I believe unaltered, edition has been issued since we received the fourth for review. M. Raphael-Georges Levy, Professor at the École libre des sciences politiques at Paris, has just published a French translation of this work together with other of Bamberger's writings in a volume of the "*Collection d'auteurs étrangers contemporains*," "*Le metal-argent à la fin du xix^e siècle*" comprises the "Fate of the Latin Union," "Silver," and "Sophistries of Silver-advocates." In "Sophistries of Silver Advocates," Bamberger reviews the case of the bimetallists in Germany, and touches at times on the international question but always from a distinctively German point of view. While there is a great wealth of valuable practical experience brought to bear on all that he has to say in favor of the unconditional maintenance of a single gold standard, and all lovers of a sound monetary theory must agree with many positions he arbitrarily takes against some of the unproved experiments that our bimetallic friends would hastily push into execution, no reader of this book can fail to see that it is the special pleading of a political leader with his eye on the practical political situation rather than the writing of a pure searcher after truth or a would-be reformer. The Agrarian party in Germany represents agricultural interests that have suffered severely in late years from some cause or causes, and it has grasped at bimetallism, at anti-semitism, and at anything else that offered an outlet for its discontent and the hope of a change; often, it is true, without other than a superficial selfish interest in the theory chosen as a means to an end, yet Bamberger is certainly a little unfair in charging all German bimetallists with fickleness and inconsistency. Bimetallism of the international type had able representatives in Germany before the movement received the political support of the Agrarian party. With this general introduction Bamberger addresses himself to the two questions upon which he believes the bimetallists rest their case, the fall in prices of agricultural products due to the gold standard having been introduced into Germany, and the injury done German agricultural interests by unfavorable competition with those lands having other money systems which enabled them to flood German markets with agricultural products.

He finds that the fall in price of agricultural products, except in a few cases where the harvests were exceptional, has been no greater than in other products and he claims that this is in no wise due to scarcity of money as the quantity of money in the world's banks and in Germany has materially increased in recent years. This last

statement is based on certain bank statistics without considering the question of the influence of possible changes in the means of doing business and is not an absolutely satisfactory proof that the stock of money has increased. Space will not permit us here to discuss in detail Herr Bamberger's successive points. He does not believe that the amount of free gold to maintain a gold standard need be very considerable, but thinks that increasing combinations of credit and balance arrangements tend to decrease the amount of gold necessary. He maintains that it is impossible to force silver into circulation where it is not wanted and refers to unsuccessful attempts of the United States Government to help silver into circulation by forwarding it free of charge to all parts of the country. He believes that since the great gold influx after the Californian and Australian discoveries, there has been a marked public preference for gold on account of its convenience and as a matter of taste, and that the crisis, which the discarding of silver produced, would have come sooner had it not been for increased Indian consumption of silver at this critical period. He declares that the increased use of silver as a reserve against the issue of notes is one of the inherently impossible plans of the bimetalists at the present time, and he finds in the so-called "Hinkende Währung" ("lame coinage," a money system on gold basis but making large use of silver),—so widespread at present only a trifle better than a silver standard, and justifiable only where it is the intermediary stage to a pure gold coinage. He meets Wagner's strong objection, that there is not enough gold reserve for the possibility of war, with the assertion that Germany's war fund, stored up in the Juliusthurm, will not be paid out at once in case of war, but used as a reserve basis to guarantee a war currency of notes, etc. The question of the fall in prices, its extent and causes, monetary conferences, the question of the old or a new ratio, the condition of the silver industry, all come in for their share of treatment. In an appendix written for this fourth edition, in July, 1893, we see the last proof of German bimetalists knocked down, in that India has seen the light and is going to adopt a gold standard, and no longer can Indian competition in agricultural products furnish the wicked Agrarians any arguments for their bimetallic faith.

As already remarked, this volume partakes throughout rather of the nature of a party program: it will convince those already convinced of the rightfulness of their position, but can in no wise be considered a scientific contribution to monetary literature, except in so far as it clears up in a very satisfactory manner and puts in splendid contrast the real points at issue in the so-called silver controversy. Herr Bamberger has added in a second supplement a German translation of two articles, by Mr. A. de Foville, originally printed in the *Economiste*

Français, Nos. 15 and 16, of 1893, entitled "Silver and Gold." The general conclusions are the same as those of Bamberger. The articles are exceedingly well written and contain in a short space one of the clearest statements of the silver question that we have seen.

Bamberger's other writings, now made more accessible to French readers, perhaps also to English ones, are no less partisan. In the preface to M. Lévy's very readable translation, he admits that M. Bamberger is a "special pleader." The "Fate of the Latin Union" contains so much valuable historical material connected with the history of this union that the French translation will be very acceptable to those to whom the German edition is less intelligible. M. Lévy has added greatly to its value by inserting in an appendix, a copy of the text of the first Latin Union treaty (1865) and of the last two, dated 1885 and November, 1893, respectively.

The next number (3) in the list of works above cited shows us that M. Lévy is more than a translator, and that he has utilized well his long experience in practical banking and monetary dealings. "*Melanges financiers*" is one of the clearest and most suggestive of recent publications, and it will repay study much better than its modest title would perhaps warrant. The first part, entitled "*la speculation et la banque*," traces the true and necessary rôle of speculation in modern business, and indicates how well organized banks should differentiate out this element or leave it to other financial institutions in order to guard the public's interests and their own position as institutions of deposit. Part second on "*l'avenir des métaux précieux*" treats the vexed question of the gold and silver supply with great fairness. It turns on the arguments of the bimetalists and mono-metallists alike the keen criticism of one who knows the actual money market, who realizes fully the present evils, but who knows equally well the difficulty in the way of making any radical change, however good theoretically, without taking due account of the transitory steps and the possibility of preserving continuity with outstanding credit obligations.

We have often thought that a possible solution of some of our monetary troubles might be obtained if governments would agree to simply stamp gold and silver coins as to their weight and fineness without expressing any value, thus leaving to individuals all responsibility in the making of contracts for deviations between past and future values. M. Lévy clearly states this idea as that which seems to him to be the most hopeful outlook, but he does not anticipate its speedy adoption owing to the very difficulties, already alluded to, of bringing such a scheme into harmony with present conditions. Part third, entitled, "*le change*," deals with the causes of fluctuations in

exchange due to varying relations of gold, silver and paper money in a country, and traces out the effect of such fluctuations on agriculture, commerce and industry. Part four, on "*le billet de banque*," gives a summary of the laws and conditions that regulate banking issues in all the countries of Europe, Asia, Africa and America. Much valuable information on the organization of the banks of issue in European countries will be found here, and it is in these last two parts of his book that M. Lévy's practical experience has served him best. Throughout, however, the fairness, keenness and clearness of his writing will warmly commend it.

To all who wish to know in a condensed way what is the present status of the Austrian Monetary Reform, Professor Wieser's lecture, delivered on January 22, 1894, before the Merchants' Club of Prague, now reprinted with some additional information, will be very welcome. Professor Wieser has a decided leaning toward international bimetallism, but he is first of all a patriotic Austrian who believes that the present reform must be carried through, that Austria must get gold enough to put her on an equal footing with other European countries before there can be any question of bimetallism. He believes that this can be done, and that Austria will secure gold enough to put her in as good a position as other countries with the exception of England. He does not deal with the question of the world's gold supply, which is of secondary importance for Austria at present. His explanation of the difficulties thus far encountered by Austria in securing gold is extremely interesting.

In a double number of the "*Vorträge und Abhandlungen*," published by the Economic Society of Berlin, Herr Heim gives us the results of further studies on the condition and outlook of the gold supply in South Africa. His first studies and conclusions published in the *Zeitschrift für die gesamten Staatswissenschaften* (Vol. 47, 1891, pp. 584-598), will be recalled as forming part of the united attack of Ruhland and Heim, in opposition to the Suess theory. Heim has visited the South African gold fields and has good command of all the sources of information. His use of statistics at times does not seem to show the care and accuracy that will guarantee their unquestioned acceptance. So many of the conclusions in such a piece of work as Herr Heim has undertaken have to do with mere speculations as to future possibilities, that the bulk of the service it is possible to render, must be to make us more familiar with actual conditions. So much interest and controversy centres at the present moment in these South African gold fields, that all light from that source is welcome and Herr Heim's contribution cannot fail to interest many readers. He is an optimist, who sees a bright future for the gold cause, in the

development and opening up of South Africa and tells us, that in the near future, South Africa alone will cause a considerable increase in the world's annual output of gold.

S. M. LINDSAY.

Essays on Questions of the Day, Political and Social. By GOLDWIN SMITH, D. C. L. Pp. vii, 360. Price, \$2.25. New York: Macmillan & Co., 1893.

Orations and Addresses of George William Curtis. Edited by CHARLES ELIOT NORTON. Vol. I: *On the Principles and Character of American Institutions, and the Duties of American Citizens, 1856-1891.* Pp. vii, 498. Vol. II: *Addresses and Reports on the Reform of the Civil Service of the United States.* Pp. vii, 527. Vol. III: *Historical and Memorial Addresses, with portrait.* Pp. vi, 406. Price, \$3.50 per vol. New York: Harper & Bro., 1894.

The reader of Dr. Smith's essays will lay the volume down at the close in a curiously confused condition of mind. He will feel as if he had been rapidly and rudely revolved about between the positive and negative poles of a powerful dynamo. Whether to be angry at the exasperating virulence and oftentimes petulance of the author's criticisms and the inconclusiveness of his observations, and astounded at his suggestion of civil war as the proper preventive of the achievement of Home Rule for Ireland, such as we find in his essays on "The Political Crisis in England," "Woman Suffrage," and "The Irish Question;" or to be filled with enthusiastic admiration at his calm and comprehensive treatment, splendid in style and cogent in argument, of other burning questions, as "Social and Industrial Revolution," "The Question of Disestablishment," "The Jewish Question," and "The Empire," and his strenuous endeavor throughout all of these essays to state fairly the premises from which he draws his conclusions: all these things place one in a quandary of conflicting judgments and feelings. But the rapid alternating currents, intellectual and emotional, will generate a good deal of vigorous thought, whether it be to understand and to agree with or to understand and to disprove his reasonings and predictions.

The judgment of the reader concerning the volume will be determined in most part by his predilections respecting the attitude of organized society toward the social, political and industrial movements of our day. If he "be a liberal of the old school as yet unconverted to State socialism who looks for further improvement not to an increase of the authority of government, but to the same agencies, moral, intellectual and economical, which have brought us thus far;" who expects gradual betterment of social condition and not "regeneration" of man, these essays will body forth his views most admirably; and

Dr. Smith will have appeared to have handled his facts fairly and adequately and drawn his conclusions rightly. If, however, the reader be an enthusiastic reformer, anxious for and expecting great things from governmental interference and participation in the affairs of men, he will be thought sadly lacking in sobriety of tone, in adequacy of treatment, in correctness of statement of representative facts and deductions from them, and most of all, in sympathy for the suffering millions.

One thing will be readily perceived in reading these essays, and that is the very practical, matter-of-fact turn of Dr. Smith's mind. He is usually spoken of as a brilliant writer and essayist, and surely if this much-abused adjective can be applied to any living writer it is applicable to him; but with Macaulay and writers of that ilk in mind, it is not usual to associate particular fondness for the hard, obstreperous facts of life and great attention to the significance of details which really characterize our profound students and thinkers who see the nature and bearings of their subjects, with brilliancy of literary style. Yet he is a keen and painstaking observer; and these pages bristle with facts taken from many years of observation in England and America of the events of the last half century, or culled from his extensive historical researches and reading.

In "Social and Industrial Revolution" the objects of the leading plans proposed by social reformers for bettering the social and industrial condition of mankind are passed in review. Communism, Socialism, nationalization of land, strikes, plans for freeing labor from capital, as in co-operation and schemes for the manipulation of the currency and the banks, are briefly set forth, and their necessary limitations and general impracticability shown in a manner that will convince the majority, if not all, who read the essay. In discussing Land Nationalization, he asks a very pertinent question—Why is land alone singled out for confiscation? All articles of commerce, raw materials especially, have been given to us by a beneficent Deity and are affected in their value by the shifting of population just as much as land. Why not apply the single tax to everything, or nationalize all things and thus prevent the iniquitous appropriation by the individual? "Looking Backward" comes in for an extended and searching criticism, and is left in rather a bad plight. In a substantial appendix we have the results of his personal visit to the Oneida communistic society and inspection of the practical workings of this noted experiment.

Upon the much mooted question of the present, Woman Suffrage, we have the most strenuous opposition to their enfranchisement. His arguments are the time-worn ones: man is the stronger vessel; the deplorable state of affairs if, as of course they will, husbands should

profess different political views from their wives; the best women and the majority of women do not wish to exercise the right of suffrage; in a word, it never has been, *ergo, non sit*. Dr. Smith takes up the various arguments of Mill's famous polemic and attempts to refute them in some detail with more or less success. But he fails notably, it appears to us, in his effort to show that from the point of view of abstract right women do not possess as good a claim to suffrage as men. To say that many do not want it is no answer to those who do want it. Because other people are willing to be imposed upon or deprived of their rights is no reason or justification for my being prevented from enjoying my rights.

Upon this question it is interesting to compare the views of the late Mr. Curtis, given us in these three handsomely bound and printed octavos, in which the Messrs. Harper have preserved the records of the noble activity of one who was so long and honorably connected with their house. Two addresses are on "Fair Play for Women" and "The Higher Education of Women." We find unqualified admission of their right to the suffrage, constant advocacy of their complete and immediate enfranchisement and earnest pleas for their highest education. Comparing men and women of all sorts and conditions, point by point, masculine capacity, physical, intellectual and moral, with feminine, contrasting in many ways the claims of each, he shows beyond a shadow of a doubt that women have just as good a right to exercise and enjoy political prerogatives and rights as have their dominating brothers.

In the second volume of "Addresses" we have perhaps the best record extant of the growth of the movement for the reform of the Civil Service in this country, if indeed there is a continuous record of any sort presenting a comprehensive view of the history of the reform. It opens with his address on "Civil Service Reform" in New York City in 1869 and closes with the eleventh address given by him as President of the National Civil Service Reform League at its meeting in Baltimore in April of 1892, on "Party and Patronage," a few months before his death. (The note of the editor to the effect that Mr. Curtis' health prevented his delivering the latter is incorrect, as the writer had the privilege and pleasure of hearing him give it *viva voce*.) Besides these there is the report made to President Grant in December, 1871, by the Civil Service Commission, of which Mr. Curtis was the chairman, upon the need of reform, the rules and regulations for the Civil Service proposed by the Commission and adopted by the President together with a second report made in April, 1872, suggesting further rules which were likewise adopted. It was this Commission which Congress in the winter of 1875 ignominiously refused to

continue in power by declining to vote the requisite appropriation for its maintenance; a proceeding which we saw dangerously near repeated during the past session of Congress, the House in Committee of the Whole on Appropriation voting to strike out the usual allowance, but the House in Open Session restoring it—both of which were indicative more of partisan pusillanimity than of anything more reputable.

There is a constant, ever deepening and enduring inspiration to the reader as he courses through these records of a life nobly given up to the arduous labor of promoting civic purity and uprightness in our national affairs and communal life. It does not so much matter that these addresses do not have a minuteness and an elaborateness of treatment befitting scientific essays and monographs; or that in some of them, especially those of his younger days, we perceive a slight haziness and evasive generality in statement that makes us feel that he was not quite sure of himself, that he would not have been able to hold his own against a doughty dialectician; but it does matter greatly that as we read we are inspired and quickened and lifted up into "an ampler ether, a diviner air," by the splendor of the discourse and the sincerity of the writer; that we are shown by deeds and brave outspoken words that it is the imperative duty of scholarly men and those in high position to enter actively into the political life of their nation and community and to give their best toward promoting and preserving high civic ideals in politics and public office, even though they may suffer "the whips and scorns of time."

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FRANK I. HERRIOTT.

Cases on Constitutional Law. By JAMES BRADLEY THAYER, LL. D. Parts I and II. Pp. xx, 944. Price, \$6.00. Cambridge, Mass.: C. W. Sever, 1894.

Although this is a work designed primarily for law students, still it is one which deserves to find wide acceptance and use wherever the constitutional history and constitutional law of the United States are taught, since its subject-matter is of fully as much importance to the student of history as to the student of law. The treatises of Cooley, Hare, Story and others find here just that supplementary and illustrative material needed in order to afford exact and complete knowledge. Much, perhaps too much, stress is sometimes laid upon the study of sources, but whatever may be its limitations in other directions, it certainly forms a very essential part of the study of American constitutional law; without a familiarity with the "cases," one must almost necessarily be frequently led astray. Nor will it suffice, as the slips of some of the most learned writers bear witness, to rely upon the head-notes of reports—the cases themselves must be read, and read with

care. Such reading is an art in itself, and expertness comes only with long practice and careful training; on this account one cannot but lament that Professor Thayer has not multiplied the invaluable notes with which he has here and there elucidated some specially obscure passages or unusually difficult problems. For it is sincerely to be hoped that teachers of American history may make extensive use of this work, and not all can have enjoyed, in their study, the guidance of a master of the subject.

The two parts issued, forming the first of the two volumes of the work when completed, deal first with some preliminary considerations respecting constitutions, with written constitutions in the United States, and with making and changing constitutions, both Federal and State; then follow chapters on the jurisdiction of the United States, on citizenship and civil and political rights, and on the police power. There are also valuable appendices, giving national and State constitutions, entire or in part. The second volume will, it may be presumed, treat, among other things, of the obligation of contracts, *ex post facto* legislation, regulation of commerce, taxation, money, bills of credit, eminent domain, and war and treaty powers.

In the more than 900 large and closely printed pages already published, Professor Thayer has provided such an abundance of material with judicious care in selection—a choice based upon many years of teaching—that one can do little more than call attention to the inestimable value of this collection of cases, both to teachers and to students. There are to be found here not only the leading cases, such as *Marbury vs. Madison*, *Fletcher vs. Peck*, *Gibbons vs. Ogden*, *McCulloch vs. Maryland*, *Texas vs. White*, the Slaughter-house cases, the Civil Rights cases, and so on, but also the less familiar and less accessible cases, which until now had to be sought through hundreds of volumes of Federal and State reports.

The editor always gives the language of the judges, never attempting to condense or summarize, except occasionally in the preliminary statement of facts, and all omissions are clearly indicated. In this exact reproduction of the opinions there is one element of danger for the inexperienced reader, in that he may sometimes fail to discriminate between dictum and decision; but the merits of the plan plainly outweigh any disadvantages connected with it. In conclusion, attention may be called to the fact that the subject is treated not only topically, but also, when possible, chronologically, and is brought down to the present time, cases of the year 1894 being cited. In this way the historical development of judicial opinion may be easily traced.

CHARLES F. A. CURRIER.

NOTES.

FEW RECENT monographs give evidence of more patient ransacking of colonial records than does Dr. Cortlandt F. Bishop's "History of Elections in the American Colonies." * In the bewildering chaos of materials the writer brings order by his logical arrangement of topics. Part I is devoted to General Elections; here are found a sketch of the history of elections of colonial executives and assemblies, a discriminating account of the varying qualifications required of the electors in the different colonies, and a description of election methods. Part II contains a similar discussion of Local Elections. Several appendices are added, giving the writs, returns and oaths in use at various times in the colonies, certain unpublished statutes relating to elections, and a list of the authorities quoted.

In assorting and condensing material from so wide a field entire freedom from inaccurate or ambiguous statement could hardly be expected. Thus in the paragraph devoted to Massachusetts elections, Endicott is mentioned as "the first governor," the context implying that the office to which he was chosen in 1629 was the one authorized by the first charter, whereas it was not until many years later that Endicott became governor of the colony.

A study of the Federal Constitution and of congressional legislation would give but an inadequate notion of our present election methods. So in this monograph there is evidence here and there (as in the sections which relate to the assistants in Massachusetts) that the history has been written too largely from the statute-books, with too little regard to the essential modifications which law underwent in actual use. But in spite of slight defects of this kind the student will find in this book a painstaking, and, in the main, accurate summary of an important and hitherto neglected chapter in American institutional history.

MANY STUDENTS of economics are doubtless familiar with the excellent reprint of Cantillon's "*Essai sur le Commerce*,"† which Harvard University made some time since. This discussion of riches, labor,

* *History of Elections in the American Colonies*. By CORTLANDT F. BISHOP, Ph. D. Pp. 297. Price, \$1.50. Columbia College Studies in History, Economics and Public Law. Vol. III, No. 1. New York, 1893.

† *Essai sur le Commerce*. R. CANTILLON. Pp. 436. Price, \$1.50. Reprinted for Harvard University. Boston: George H. Ellis, 1892.

value, population, money, currency and exchange was written, as the editor of the reprint says, "between 1730 and 1734 by Richard Cantillon, a natural-born British subject." The preface to the reprint gives a brief biographical sketch of Cantillon, and a short list of the writings concerning the work of Cantillon. The edition of 1755 is the one reprinted. It has been reproduced from the French as far as possible without change. The binding and press work are well executed. The work forms a useful addition to the material available to students of economic theory.

MR. WILLIAM EPPS' "*Land Systems of Australia*"* contains a digest of the changes in the legislation of the several Australian provinces concerning the alienation and the occupation of land, with pertinent statistics. Large proportions of the land, whether "owned" or "occupied," are in large estates which are used for bonanza farming, or are held for speculation. No province has been able to forestall speculation. The author is "appalled" at the statistical disclosures of the relative increase of urban population even in this virgin land. New Zealand has recently undertaken to limit the amount of land owned or occupied to two thousand acres; and the governor is further authorized to establish State farms, to which "the surplus workmen of the town" shall be drafted. From a perusal of the book, it is apparent that there are economic forces at work in the settlement of Australia which the author does not appreciate at their true worth.

PERSONS DESIRING a brief sketch of English commercial history will find a recent book by H. de B. Gibbins† very readable. It is written in the form and style of a brief textbook. The writings of Bastable and Cunningham have been made use of to good advantage by the author. The style of the author is clear, the arrangement good, and the material has been chosen with discrimination. A good list of authorities, taken from Bastable article on "British Commerce," in the "*Dictionary of Political Economy*," is inserted at the end of the book.

THE FRIENDS of the University of Wisconsin have established two scholarships that enable the students holding them to do charitable work during the summer in Cincinnati and vicinity. The work is

* *Land Systems in Australia*. By WILLIAM EPPS. Pp. 184. Price, \$1.00. London: Swan, Sonnenschein & Co. New York: Imported by C. Scribner's Sons, 1894.

† *British Commerce and Colonies from Elizabeth to Victoria*. By H. DE B. GIBBINS, M. A. Pp. 136. Price, 1s. 6d. London: Methuen & Co., 1893.

done under the direction of Dr. P. W. Ayres, General Secretary of the Associated Charities of Cincinnati. As stated by Professor Ely, of the University of Wisconsin, the plan is to do work, "first, in the homes of certain portions of the city; second, in various municipal offices to which the Associated Charities has access; third, in various public and private institutions in Cincinnati and the neighboring cities." The two scholars appointed from the University of Wisconsin this year were Henry S. Younker and George S. Wilson, of the Class of 1894.

THE EIGHTH SESSION of the International Congress of Hygiene and Demography will be held at Budapest September 1-9. The following comprehensive list of subjects has been selected for discussion:

Hygiene: I. Section: The Aetiology of Infectious Diseases (Bacteriology).—II. Section: The Prophylaxis of Epidemics.—III. Section: The Hygiene of the Tropics.—IV. Section: The Hygiene of Trades and Agriculture.—V. Section: The Hygiene of Children.—VI. Section: The Hygiene of Schools.—VII. Section: Articles of Food.—VIII. Section: The Hygiene of Towns.—IX. Section: The Hygiene of Public Buildings.—X. Section: The Hygiene of Dwellings.—XI. Section: The Hygiene of Communications (Railroads and Navigation).—XII. Section: Military Hygiene.—XIII. Section: Saving of Life.—XIV. Section: State Hygiene.—XV. Section: The Hygiene of Sport (Inurement and Care of the Body).—XVI. Section: The Hygiene of Baths.—XVII. Section: Veterinary.—XVIII. Section: Pharmacology.—XIX. Section: General Samaritan Affairs.

Demography: I. Section: Historical Demography.—II. Section: General Demography and Anthropometry.—III. Section: The Technic of Demography.—IV. Section: The Demography of the Agricultural Classes.—V. Section: The Industrial Laborers from the Demographic Point of View.—VI. Section: The Demography of Towns.—VII. Section: The Statistics of Bodily and Mental Defects.

Up to June 15th 718 papers had been promised. In connection with the Congress, there will be an exhibition for the purpose of illustrating the questions discussed, and showing the progress made in practical sanitation, etc. Provision is made for the entertainment of women attending the conference. The general secretary is Professor Dr. Coloman Müller.

MACMILLAN & Co. have brought out an elementary textbook on "Commercial Law."* Mr. Munro, the author, is "of the Middle Temple, Barrister-at-Law, formerly Professor of Law in the Owens

* *Commercial Law.* An elementary textbook for commercial classes. By J. E. C. MUNRO, LL. D. Pp. viii, 191. Price, 3s. 6d. London and New York: Macmillan & Co., 1893.

College, Manchester. He has written "to provide an elementary textbook on commercial law, for schools and colleges." The work will doubtless prove useful to English students; but, inasmuch as the discussion is only of English commercial law, Americans will find the book serviceable only to a limited extent. A textbook of like character, written for Americans, would be a useful work.

MR. BURTON WILLIS POTTER has brought out a third and enlarged edition of "*The Road and the Roadside*."* It is popular in style, written for the double purpose of awakening an interest in better roads and of giving information concerning the laws pertaining to Massachusetts highways. Mr. Potter's legal training qualified him well for the second purpose, and that part of the work has much merit. Less can be said in favor of the other portions of the book, though they may possibly do something to awaken a popular interest in the subjects discussed. The appearance of a third edition, seven years after the first one, is evidence that this is the case.

IT IS THE INTENTION of Dr. C. W. Macfarlane, author of a recent monograph,† to write a "*History of the General Doctrine of Rent*" that shall include a review of the contributions to the subject by the English, French and German economists. The present monograph will form a part of that more comprehensive work. In this dissertation upon the contribution to the doctrine by German economists, the author considers the works of Hufeland, Kraus, Lüder, Jacob, Rau, Nebenius, Hermann, Schön, Riedel, Schüz, Eiselen, Mangoldt and Schäffle. He develops the subject by determining whether these writers extend the law of rent to land, labor, capital and the undertaker. In the case of land, he ascertains whether, in applying the law, the following Ricardian concepts are recognized: Difference in fertility, distance from market, law of increasing return, law of diminishing return, price determined by greatest cost, and rent determined by price. Some of the results of his study may be briefly stated as follows: The rent of capital is *formally* recognized by Hufeland, 1807; and by Rau, 1826; it is *actually* recognized by Hermann, 1832; and it is both formally and actually recognized by Mangoldt, 1855. The rent of labor and the rent of the undertaker are both formally and actually recognized by Hufeland and by Mangoldt.

* *The Road and the Roadside*. By BURTON WILLIS POTTER, M. A. Third edition, revised and enlarged. Pp. xix, 250. Price, \$1.50. Boston: Little, Brown & Co., 1893.

† *The History of the General Doctrine of Rent in German Economics*. By C. W. MACFARLANE, C. E. Pp. 61. Leipzig: Gustav Fock, 1893.

Even before Hufeland, the functions and qualifications of the undertaker were more or less clearly stated. In the application of the doctrine of rent to land, "we find in Hufeland a clear and explicit statement of all the Ricardian propositions, except the law of diminishing return; this, however, seems to have been quite frequently lost sight of in German, as well as in English economics," p. 57. A complete acceptance of the Ricardian doctrine is found in Rau, 1826. As a whole, the work is characterized by great painstaking and judicious criticism. There are, however, a few matters to which exceptions may be taken. Hufeland's contribution to the doctrine of land rent is overestimated. The author writes of Hufeland: "He parallels Ricardo (1815) in almost all his fundamental propositions. They are, perhaps, not quite so clearly stated as at the hands of the great Englishman, yet clear enough to leave no doubt as to his complete grasp of the question," p. 12. Now it is interesting to note that *every one* of the Ricardian concepts which the author finds expressed in Hufeland is taken by Hufeland from Adam Smith. Although President Walker shows that the return of the entrepreneur follows the same law as the rent of land, the author claims that "he has failed to reach that generality of concept found among those German economists who have contributed materially to the discussion, for, unlike them, he does not call this return—which admittedly follows the law of rent—the rent of the entrepreneur, but the profit of the entrepreneur," p. 9. But the mere fact that President Walker calls the return of the entrepreneur profit, and not rent, does not prove that he has failed to reach the generality of concept. Rau, Roscher and Mithoff, writing subsequently to Mangoldt and Schäffle, note the treatment of the rent doctrine by those economists, and yet refuse to accept their nomenclature.